UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 2 Form S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CUMBERLAND PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Tennessee (State or other jurisdiction of incorporation or organization)

Cumberland Pharmaceuticals Inc. 2525 West End Avenue, Suite 950 Nashville, Tennessee 37203 (615) 255-0068 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices) 62-1765329 (IRS Employer Identification No.)

Michael Bonner Chief Financial Officer Cumberland Pharmaceuticals Inc. 2525 West End Avenue, Suite 950 Nashville, Tennessee 37203 (615) 255-0068 (Name and address, including zip code, and telephone number, including area code, of agent for service)

copy to:

Phillip Buffington, Jr., Esq. Adams and Reese LLP 1018 Highland Colony Parkway, Suite 800, Ridgeland, Mississippi 39157 (601) 292-0745

Approximate date of commencement of proposed sale of securities to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462 (c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes (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 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered /proposed maximum offering price per unit/ proposed maximum offering price(1)(2)	Amount of registration fee
Common Stock		
Preferred Stock		
Warrants		
Debt Securities		
Total	\$100,000,000	\$12,450(3)

(1) There are being registered an indeterminate principal amount or number of common stock, preferred stock, securities warrants and debt securities as shall have an aggregate initial offering price of the securities issued or sold under this Registration Statement not to exceed \$100,000,000. Separate consideration may or may not be received for securities that are being registered that are issued in exchange for, or upon conversion or exercise of, the preferred stock, securities warrants or debt securities being registered hereunder, but it is included in the maximum aggregate offering price.

(2) Subject to footnote (1), this registration statement also covers an indeterminate amount of Common Stock, Preferred Stock, and/or Debt Securities that may be issued in exchange for, or upon conversion or exercise of, the preferred stock, securities warrants or debt securities being registered. Any securities being registered may be sold separately or as units with other securities being registered.

3) Previously paid.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated January 8, 2018

PROSPECTUS

\$100,000,000

CUMBERLAND PHARMACEUTICALS INC.

Common Stock Preferred Stock Warrants Debt Securities

We may offer and sell, from time to time in one or more offerings, up to \$100,000,000 in the aggregate of common stock, preferred stock, or warrants to purchase our common stock or preferred stock, or debt securities (which may or may not be guaranteed by one or more of our subsidiaries), at prices and on terms that we will determine at the time of the offering. Preferred stock and debt securities may be convertible into preferred stock, common stock, or debt securities.

Each time we sell securities, to the extent required by applicable law, we will provide a supplement to this prospectus that contains specific information about the offering and the terms of the securities being offered. The supplement may also add, update or change information contained in this prospectus. You should carefully read this prospectus, all prospectus supplements and all other documents incorporated by reference in this prospectus before you invest in our securities.

We will offer the securities in amounts, at prices and on terms to be determined by market conditions at the time of the offerings. The securities may be offered separately or together in any combination.

We may offer the securities directly or through underwriters, agents or dealers. The supplements to this prospectus will designate the terms of our plan of distribution. See the discussion under the heading "Plan of Distribution" for more information on the topic.

Our executive offices are located at 2525 West End Avenue, Suite 950, Nashville, Tennessee 37203, and our telephone number is (615) 255-0068. Our common stock trades on the Nasdaq Global Select Market under the symbol "CPIX." On December 13, 2017, the closing price for our common stock, as reported by Nasdaq, was \$7.48 per share.

Investing in our securities involves risk. Please see "<u>Risk Factors</u>" beginning on page 2 for a discussion of certain risks that you should consider before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus may not be used to consummate sales of securities unless accompanied by a prospectus supplement.

The date of this prospectus is January , 2018.

Table of Contents

ABOUT THIS PROSPECTUS	1
ABOUT CUMBERLAND PHARMACEUTICALS INC.	1
RISK FACTORS	2
CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS	2
THE COMPANY	3
RATIO OF EARNINGS TO FIXED CHARGES AND EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS	6
<u>USE OF PROCEEDS</u>	7
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	8
DESCRIPTION OF DEBT SECURITIES	9
DETERMINATION OF OFFERING PRICE	19
PLAN OF DISTRIBUTION	20
LEGAL MATTERS	21
<u>EXPERTS</u>	21
WHERE YOU CAN FIND MORE INFORMATION	22
INFORMATION INCORPORATED BY REFERENCE	22

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission using a "shelf" registration process. Using this process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$100,000,000.

Each time we use this prospectus to offer securities, we will provide a prospectus supplement that will describe the specific terms of the offering. The prospectus supplement may also add to or update other information contained in this prospectus.

In making your investment decision, you should rely only on the information contained or incorporated by reference in this prospectus and any prospectus supplement we may authorize to be delivered to you. This prospectus incorporates important business and financial information about us that is not included in or delivered with this prospectus. You may obtain a copy of this information, without charge, as described in the "Where You Can Find More Information" section. We have not authorized anyone to provide you with any other information. If you receive any other information, you should not rely on it.

You should not assume that the information appearing in this prospectus is accurate as of any date other than the date on the front cover of this prospectus. You should not assume that the information contained in the documents incorporated by reference in this prospectus is accurate as of any date other than the respective dates of those documents. Our business, financial condition, results of operations, reserves and prospects may have changed since that date.

We encourage you to read this entire prospectus together with the documents incorporated by reference into this prospectus before making a decision whether to invest in our securities.

ABOUT CUMBERLAND PHARMACEUTICALS INC.

In this prospectus, "Cumberland," "we," "our," and "us" refer to Cumberland Pharmaceuticals Inc.

Cumberland 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.

We are a Tennessee corporation. Our principal executive offices are located at 2525 West End Avenue, Suite 950, Nashville, Tennessee 37203. Our telephone number is (615) 255-0068. We maintain a website at <u>www.cumberlandpharma.com</u>, which contains information about us. Our website and the information contained on it and connected to it will not be deemed incorporated by reference into this prospectus. Our common stock is listed on the Nasdaq Global Select Market under the symbol "CPIX."

RISK FACTORS

An investment in our securities involves a certain degree of risk. You should carefully consider the factors contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 under the heading "Risk Factors" and updated, if applicable, in our Quarterly Reports on Form 10-Q before investing in our securities. You should also consider similar information contained in any Annual Report on Form 10-K, Quarterly Report on Form 10-Q or other document filed by us with the SEC after the date of this prospectus before deciding to invest in our securities. If any of these risks were to occur, our business, financial condition or results of operations could be adversely affected. In that case, the trading price of our common stock or other securities could decline and you could lose all or part of your investment. When we offer and sell any securities pursuant to a prospectus supplement, we may include additional risk factors relevant to such securities in the prospectus supplement.

On November 7, 2017, we entered into a Sales Agreement with B. Riley FBR, Inc. (the "ATM Agreement"), under which we may offer and sell our common stock having aggregate sales proceeds of up to \$25 million from time to time through our sales agent.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS

Certain information included in this prospectus may be deemed to be forward-looking statements. Where any forward-looking statement includes a statement of the assumptions or bases underlying the forward-looking statement, we caution that, while we believe these assumptions or bases to be reasonable and made in good faith, assumed facts or bases almost always vary from the actual results, and the differences between assumed facts or bases and actual results can be material, depending upon the circumstances. Where, in any forward-looking statement, we express an expectation or belief as to future results, such expectation or belief is expressed in good faith and is believed to have a reasonable basis. We cannot assure you, however, that the statement of expectation or belief will result or be achieved or accomplished. These statements relate to analyses and other information which are based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to our future prospects, developments and business strategies. These forward-looking statements are identified by their use of terms and phrases such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will," and similar terms and phrases, including references to assumptions. These statements are contained in the section "Risk Factors" and other sections of this prospectus. These forward looking statements involve risks and uncertainties that may cause our actual future activities and results of operations to be materially different from those suggested or described in this prospectus. These risks include the risks that are identified in the "Risk Factors" section of this prospectus, and also include, among others, and without limitation, the following:

- legislative, regulatory, or other changes in the healthcare industry at the local, state, federal or international level which increases the costs of, or otherwise affect our operations;
- changes in reimbursement available to us by government or private payers, including changes in Medicare and Medicaid payment levels and availability of third-party insurance coverage;
- competition; and
- changes in national or regional economic conditions, including changes in interest rates and availability and cost of capital to us.

We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or otherwise. If one or more of these risks or uncertainties materialize, or if underlying assumptions prove incorrect, our actual results may vary materially from those expected, estimated or projected.

THE COMPANY

We are 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;
- PortabanTM (ifetroban) oral formulation, 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.

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 multiyear 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 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 the 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 Syndrom ("HRS")—a life threatening condition involving liver and kidney failure, with a high mortality rate and no approved pharmaceutical therapy in this country. We complete 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 an 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 I, 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 I, Item 3, Legal Proceedings* in our Form 10-K for the year ended December 31, 2016.

RATIOS OF EARNINGS TO FIXED CHARGES AND TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

Our ratios of earnings to fixed charges and our ratios of earnings to combined fixed charges and tax-adjusted preferred stock dividends were as follows for the periods indicated in the table below.

	Nine Months Ended September 30, 2017	Year ended December 31,				
(Dollar amounts in thousands)		2016	2015	2014	2013	2012
Ratio of earnings to fixed charges(1)(2)	*	*	6.2	18.1	*	41.2

(1) Our ratios of earnings to fixed charges and our ratios of earnings to combined fixed charges and tax-adjusted preferred stock dividends are calculated by dividing earnings by fixed charges and preference dividends, if any. For these purposes, earnings consist of pre-tax income (loss) from continuing operations plus fixed charges. Fixed charges consist of interest expense, which includes amortization of debt issuance costs, plus one-third (the proportion deemed to be representative of the interest factor) of rent expense.

(2) The Company did not have any preferred stock outstanding for any of the periods presented.

* Our earnings were inadequate to cover fixed charges for the nine months ended September 30, 2017 and the years ended December 31, 2016 and 2013.

USE OF PROCEEDS

Unless otherwise specified in a prospectus supplement accompanying this prospectus, we expect to use the net proceeds from the sale of our securities for general corporate purposes, which may include, among other things, the financing of capital expenditures, acquisitions and additions to our working capital. The actual application of proceeds from the sale of any particular tranche of securities issued hereunder will be described in the applicable prospectus supplement relating to such tranche of securities.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital consists of 120,000,000 shares of stock at no par value. Of the authorized capital, 100,000,000 shares are authorized to be issued as common stock and 20,000,000 shares are authorized to be issued as preferred stock. Our issued and outstanding shares of common stock as of September 30, 2017 consisted of 15,781,736 shares which were held by 72 shareholders of record, which excludes shareholders whose shares are held in nominee or street name by brokers. To date, there are no issued and outstanding shares of preferred stock.

The following description of our capital stock summarizes general terms and provisions that apply to our capital stock. Since this is only a summary, it does not contain all of the information that may be important to you. The summary is subject to and qualified in its entirety by reference to our Third Amended and Restated Charter and our Second Amended and Restated Bylaws, which are incorporated by reference into this prospectus. See "Where You Can Find More Information."

Common Stock

For all matters submitted to a vote of shareholders, holders of common stock are entitled to one vote for each share registered in his or her name on our books, and they do not have cumulative voting rights. Each share of the common stock is entitled to share equally with each other share of common stock in dividends from sources legally available therefore, when, as, and if declared by the board of directors and, upon our liquidation or dissolution, whether voluntary or involuntary, to share equally in the assets that are available for distribution to the holders of the common stock. We have not paid any cash dividends since our inception. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The board of directors is authorized to issue additional shares of common stock within the limits authorized by our Third Amended and Restated Charter and without shareholder action.

Preferred Stock

Shares of preferred stock may be issued from time to time in one or more classes or series, each such class or series to be so designated as to distinguish the shares thereof from the shares of all other series and classes. The board of directors is authorized to divide preferred stock into classes or series and to fix and determine the relative rights, preferences, qualifications and limitations of the shares of any class or series so established. The number of shares of Preferred Stock the Company may offer is up to 20,000,000 and those shares can be one or more classes or series.

The Company has designated 3 million shares of Preferred Stock as Series A ("Series A"). A summary of the terms of the Series A is set forth below:

- Currently there are 3 million shares of Series A designated,
- with a liquidation value of \$3.25,
- dividend rate on parity with the common stock,
- · voting rights equal to one vote per share,
- not redeemable or subject to a sinking fund;
- the price at which the preferred stock will be issued will be set by the Company;

The rights, preferences, qualifications, limitations and restrictions on the remaining shares of Preferred Stock shall be set by the Company prior to issuance and those terms of any new series or classes of preferred stock will be filed with the SEC. The Company will determine whether the preferred stock is convertible or exchangeable for any other securities, and the terms of any such conversion. All other rights, preferences, qualifications, limitations and restrictions of the preferred stock shall be established by the Company before issuance and filed with the SEC.

If we offer to sell preferred stock, our board of directors is authorized to designate and issue shares of preferred stock in one or more series without shareholder approval. Our board of directors would have discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The terms, conditions and provisions of the Series A Preferred Stock are described in Exhibit 4.2.

It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until the board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; and
- delaying or preventing a change in control of our company.

Transfer Agent or Registrar

Continental Stock Transfer & Trust Company is the transfer agent and registrar of our common stock.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock or preferred stock. Warrants may be issued independently or together with common stock or preferred stock offered by any prospectus supplement and may be attached to or separate from any such offered securities. Series of warrants may be issued under a separate warrant agreement entered into between us and a bank or trust company, as warrant agent, all as will be set forth in the prospectus supplement relating to the particular issue of warrants. The warrant agent would act solely as our agent in connection with the warrants and would not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants.

The following summary of certain provisions of the warrants does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all provisions of the warrant agreements.

Reference is made to the prospectus supplement relating to the particular issue of warrants offered pursuant to such prospectus supplement for the terms of and information relating to such warrants, including, where applicable:

 number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase common stock or preferred stock and the price at which such number of shares of common stock or preferred stock may be purchased upon such exercise;

- the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;
- United States federal income tax consequences applicable to such warrants;
- the amount of warrants outstanding as of the most recent practicable date; and
- any other terms of such warrants.

Warrants will be issued in registered form only. The exercise price for warrants will be subject to adjustment in accordance with the applicable prospectus supplement.

Each warrant will entitle the holder thereof to purchase such number of shares of common stock or preferred stock at such exercise price as shall in each case be set forth in, or calculable from, the prospectus supplement relating to the warrants, which exercise price may be subject to adjustment upon the occurrence of certain events as set forth in such prospectus supplement. After the close of business on the expiration date, or such later date to which such expiration date may be extended by us, unexercised warrants will become void. The place or places where, and the manner in which, warrants may be exercised shall be specified in the prospectus supplement relating to such warrants.

Prior to the exercise of any warrants to purchase common stock or preferred stock, holders of such warrants will not have any of the rights of holders of common stock or preferred stock, as the case may be, purchasable upon such exercise, including the right to receive payments of dividends, if any, on the common stock purchasable upon such exercise any applicable right to vote.

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms of debt securities to which any prospectus supplement may relate. A prospectus supplement will describe the terms relating to any debt securities to be offered in greater detail, and may provide information that is different from this prospectus. If the information in the prospectus supplement differs with respect to the particular debt securities being offered from this prospectus, you should rely on the information in the prospectus supplement. The debt securities may be issued from time to time in one or more series. The particular terms of each series that are offered by a prospectus supplement will be described in the prospectus supplement.

We may conduct a portion of our operations through subsidiaries. Unless the debt securities are guaranteed by our subsidiaries as described below, the rights of our company and our creditors, including holders of the debt securities, to participate in the assets of any subsidiary upon the latter's liquidation or reorganization will be subject to the prior claims of the subsidiary's creditors, except to the extent that we may ourselves be a creditor with recognized claims against such subsidiary.

The debt securities will be either our senior debt securities or our subordinated debt securities. The senior debt securities and the subordinated debt securities will be issued under separate indentures among us, and any domestic subsidiaries that become guarantors of the debt securities (and are added as co-registrants to the registration statement of which this prospectus supplement forms a part), and a trustee that meets certain requirements and is selected by us (the "Trustee"). Senior debt securities will be issued under a "Senior Indenture" and subordinated debt securities will be issued under a "Subordinated Indenture." Together, the Senior Indenture and the Subordinated Indenture are called "Indentures."

We have summarized selected provisions of the Indentures below. The summary is not complete and is qualified in its entirety by express reference to the provisions of the Indentures. The form of each Indenture has been filed with the SEC as an exhibit to the registration statement of which this prospectus is a part, and you should read the Indentures for provisions that may be important to you. In the summary below, we have included references to article or section numbers of the applicable Indenture so that you can easily locate these provisions. Whenever we refer in this prospectus or in the prospectus supplement to particular article or sections or defined terms of the Indentures, those article or sections or defined terms are incorporated by reference herein or therein, as applicable. The Indentures will be subject to and governed by certain provisions of the Trust Indenture Act of 1939, and we refer you to the Indentures and the Trust Indenture Act for a statement of such provisions. Capitalized terms used in the summary have the meanings specified in the Indentures.

Table of Contents

General

We may offer debt securities under this prospectus. The Indentures do not limit the aggregate amount of debt securities, and we may issue debt securities up to the aggregate principal amount which may be authorized from time to time by the board of directors. The Indentures provide that debt securities in separate series may be issued thereunder from time to time without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series (Section 301). We will determine the terms and conditions of the debt securities, including the maturity, principal and interest, but those terms must be consistent with the Indenture. The debt securities will be our unsecured obligations.

The subordinated debt securities will be subordinated in right of payment to the prior payment in full of all of our Senior Debt (as defined) as described under "—Subordination of Subordinated Debt Securities" and in the prospectus supplement applicable to any subordinated debt securities. If the prospectus supplement so indicates, the debt securities will be convertible into our common stock (Section 301).

The applicable prospectus supplement will set forth the price or prices at which the debt securities to be offered will be issued and will describe the following terms of such debt securities:

(1) the designation, aggregate principal amount and authorized denominations of the debt securities;

(2) whether the debt securities are senior debt securities or subordinated debt securities and, if subordinated debt securities, the related subordination terms;

(3) any limit on the aggregate principal amount of the debt securities;

(4) the dates on which the principal of the debt securities will be payable;

(5) the interest rate that the debt securities will bear and the interest payment dates for the debt securities;

(6) the places where payments on the debt securities will be payable;

(7) any terms upon which the debt securities may be redeemed, in whole or in part, at our option;

(8) any sinking fund or other provisions that would obligate us to repurchase or otherwise redeem the debt securities;

(9) the portion of the principal amount, if less than all, of the debt securities that will be payable upon declaration of acceleration of the Maturity of the debt securities;

(10) whether the debt securities are defeasible;

(11) any addition to or change in the Events of Default;

(12) whether the debt securities are convertible into our common stock and, if so, the terms and conditions upon which conversion will be effected, including the initial conversion price or conversion rate and any adjustments thereto and the conversion period;

(13) any addition to or change in the covenants in the Indenture applicable to the debt securities; and

(14) any other terms of the debt securities not inconsistent with the provisions of the Indenture (Section 301).

Debt securities, including Original Issue Discount Securities, may be sold at a substantial discount below their principal amount. Special United States federal income tax considerations applicable to debt securities sold at an original issue discount may be described in the applicable prospectus supplement. In addition, special United States federal income tax or other considerations applicable to any debt securities that are denominated in a currency or currency unit other than United States dollars may be described in the applicable prospectus supplement.

Senior Debt Securities

The senior debt securities will be our direct-unsecured obligations and will constitute senior indebtedness (in each case as defined in the applicable Supplemental Indenture) ranking on a parity with all of our other unsecured and unsubordinated indebtedness.

Subordination of Subordinated Debt Securities

The indebtedness evidenced by the subordinated debt securities will, to the extent set forth in the Subordinated Indenture with respect to each series of subordinated debt securities, be subordinate in right of payment to the prior payment in full of all of our Senior Debt, including the senior debt securities, and it may also be senior in right of payment to all of our Subordinated Debt (Article Twelve of the Subordinated Indenture). The prospectus supplement relating to any subordinated debt securities will summarize the subordination provisions of the Subordinated Indenture applicable to that series including:

- the applicability and effect of such provisions upon any payment or distribution respecting that series following any liquidation, dissolution
 or other winding-up, or any assignment for the benefit of creditors or other marshaling of assets or any bankruptcy, insolvency or similar
 proceedings;
- the applicability and effect of such provisions in the event of specified defaults with respect to any Senior Debt, including the circumstances
 under which and the periods in which we will be prohibited from making payments on the subordinated debt securities; and
- the definition of Senior Debt applicable to the subordinated debt securities of that series and, if the series is issued on a senior subordinated basis, the definition of Subordinated Debt applicable to that series.

The prospectus supplement will also describe as of a recent date the approximate amount of Senior Debt to which the subordinated debt securities of that series will be subordinated.

The failure to make any payment on any of the subordinated debt securities by reason of the subordination provisions of the Subordinated Indenture described in the prospectus supplement will not be construed as preventing the occurrence of an Event of Default with respect to the subordinated debt securities arising from any such failure to make payment.

The subordination provisions described above will not be applicable to payments in respect of the subordinated debt securities from a defeasance trust established in connection with any legal defeasance or covenant defeasance of the subordinated debt securities as described under "—Legal Defeasance and Covenant Defeasance."

Form, Exchange and Transfer

The debt securities of each series will be issuable only in fully registered form, without coupons, and, unless otherwise specified in the applicable prospectus supplement, only in denominations of \$1,000 and integral multiples thereof (Section 302).

At the option of the Holder, subject to the terms of the applicable Indenture and the limitations applicable to Global Securities, debt securities of each series will be exchangeable for other debt securities of the same series of any authorized denomination and of a like tenor and aggregate principal amount (Section 305).

Subject to the terms of the applicable Indenture and the limitations applicable to Global Securities, debt securities may be presented for exchange as provided above or for registration of transfer (duly endorsed or with the form of transfer endorsed thereon duly executed) at the office of the Security Registrar or at the office of any transfer agent designated by us for such purpose. No service charge will be made for any registration of transfer or exchange of debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in that connection. Such transfer or exchange will be effected upon the Security Registrar or such transfer agent, as the case may be, being satisfied with the documents of title and identity of the person making the request. The Security Registrar and any other transfer agent initially designated by us for any debt securities will be named in the applicable prospectus supplement (Section 305). We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each Place of Payment for the debt securities of each series (Section 1002).

If the debt securities of any series (or of any series and specified tenor) are to be redeemed in part, we will not be required to (1) issue, register the transfer of or exchange any debt security of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any such debt security that may be selected for redemption and ending at the close of business on the day of such mailing or (2) register the transfer of or exchange any debt security so selected for redemption, in whole or in part, except the unredeemed portion of any such debt security being redeemed in part (Section 305).

Global Securities

Some or all of the debt securities of any series may be represented, in whole or in part, by one or more Global Securities that will have an aggregate principal amount equal to that of the debt securities they represent. Each Global Security will be registered in the name of a Depositary or its nominee identified in the applicable prospectus supplement, will be deposited with such Depositary or nominee or its custodian and will bear a legend regarding the restrictions on exchanges and registration of transfer thereof referred to below and any such other matters as may be provided for pursuant to the applicable Indenture.

Notwithstanding any provision of the Indentures or any debt security described in this prospectus, no Global Security may be exchanged in whole or in part for debt securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any person other than the Depositary for such Global Security or any nominee of such Depositary unless:

(1) the Depositary has notified us that it is unwilling or unable to continue as Depositary for such Global Security or has ceased to be qualified to act as such as required by the applicable Indenture, and in either case we fail to appoint a successor Depositary within 90 days;

(2) an Event of Default with respect to the debt securities represented by such Global Security has occurred and is continuing and the Trustee has received a written request from the Depositary to issue certificated debt securities; or

(3) other circumstances exist, in addition to or in lieu of those described above, as may be described in the applicable prospectus supplement.

All debt securities issued in exchange for a Global Security or any portion thereof will be registered in such names as the Depositary may direct (Sections 205 and 305).

As long as the Depositary, or its nominee, is the registered holder of a Global Security, the Depositary or such nominee, as the case may be, will be considered the sole owner and Holder of such Global Security and the debt securities that it represents for all purposes under the debt securities and the applicable Indenture (Section 308). Except in the limited circumstances referred to above, owners of beneficial interests in a Global Security will not be entitled to have such Global Securities in exchange for those interests and will not be considered to be the owners or Holders of such Global Security or any debt securities in exchange for those interests and will not be considered to be the owners or Holders of such Global Security will be made to the Depositary or its nominee, as the case may be, as the Holder of the security. The laws of some jurisdictions require that some purchasers of debt securities take physical delivery of such debt securities in definitive form. These laws may impair the ability to transfer beneficial interests in a Global Security.

Ownership of beneficial interests in a Global Security will be limited to institutions that have accounts with the Depositary or its nominee ("Participants") and to persons that may hold beneficial interests through Participants. In connection with the issuance of any Global Security, the Depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the Global Security to the accounts of its Participants. Ownership of beneficial interests in a Global Security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the Depositary (with respect to Participants' interests) or any such Participant (with respect to interests of persons held by such Participants on their behalf). Payments, transfers, exchanges and other matters relating to beneficial interests in a Global Security may be subject to various policies and procedures adopted by the Depositary from time to time. None of us, the Subsidiary Guarantors, the Trustees or the agents of ourself, the Subsidiary Guarantors or the Trustees will have any responsibility or liability for any aspect of the Depositary's or any Participant's records relating to, or for payments made on account of, beneficial interests in a Global Security, or for maintaining, supervising or reviewing any records relating to such beneficial interests.

Payment and Paying Agents

Unless otherwise indicated in the applicable prospectus supplement, payment of interest on a debt security on any Interest Payment Date will be made to the Person in whose name such debt security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest (Section 307).

Unless otherwise indicated in the applicable prospectus supplement, principal of and any premium and interest on the debt securities of a particular series will be payable at the office of such Paying Agent or Paying Agents as we may designate for such purpose from time to time, except that at our option payment of any interest on debt securities in certificated form may be made by check mailed to the address of the Person entitled thereto as such address appears in the Security Register. Unless otherwise indicated in the applicable prospectus supplement, the corporate trust office of the Trustee under the Senior Indenture in the City of New York will be designated as sole Paying Agent for payments with respect to senior debt securities of each series, and the corporate trust office of the Trustee under the Subordinated Indenture in the City of New York will be designated debt securities of each series. Any other Paying Agents initially designated by us for the debt securities of a particular series will be named in the applicable prospectus supplement. We may at any time designate additional Paying Agents or rescind the designation of any Paying Agent or approve a change in the office through which any Paying Agent acts, except that we will be required to maintain a Paying Agent in each Place of Payment for the debt securities of a particular series (Section 1002).

All money paid by us to a Paying Agent for the payment of the principal of or any premium or interest on any debt security which remain unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the Holder of such debt security thereafter may look only to us for payment (Section 1003).

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge into, or transfer, lease or otherwise dispose of all or substantially all of our assets to, any Person (a "successor Person"), and may not permit any Person to consolidate with or merge into us, unless:

(1) the successor Person (if any) is a corporation, partnership, trust or other entity organized and validly existing under the laws of any domestic jurisdiction and assumes our obligations on the debt securities and under the Indentures including the due and punctual payment of the principal of, any premium on, and any interest on, all of the outstanding debt securities and the performance of every covenant applicable to be performed or observed by us;

(2) immediately before and after giving pro forma effect to the transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, has occurred and is continuing;

(3) we deliver to the trustee an officer's certificate and an opinion of counsel, each stating that such consolidation, merger, conveyance or transfer and such Supplemental Indenture comply with the foregoing provisions relating to such transaction; and

(4) several other conditions, including any additional conditions with respect to any particular debt securities specified in the applicable prospectus supplement, are met (Section 801).

Events of Default

Unless otherwise specified in the prospectus supplement, each of the following will constitute an Event of Default under the applicable Indenture with respect to debt securities of any series:

(1) failure to pay principal of or any premium on any debt security of that series when due, whether or not, in the case of subordinated debt securities, such payment is prohibited by the subordination provisions of the Subordinated Indenture;

(2) failure to pay any interest on any debt securities of that series when due, continued for 30 days, whether or not, in the case of subordinated debt securities, such payment is prohibited by the subordination provisions of the Subordinated Indenture;

(3) failure to deposit any sinking fund payment, when due, in respect of any debt security of that series, whether or not, in the case of subordinated debt securities, such deposit is prohibited by the subordination provisions of the Subordinated Indenture;

(4) failure to perform or comply with the provisions described under "-Consolidation, Merger and Sale of Assets";

(5) failure to perform any of our other covenants in such Indenture (other than a covenant included in such Indenture solely for the benefit of a series other than that series), continued for 60 days after written notice has been given by the applicable Trustee, or the Holders of at least 25% in principal amount of the Outstanding debt securities of that series, as provided in such Indenture; and

(6) certain events of bankruptcy, insolvency or reorganization affecting us or any Significant Subsidiary.

If an Event of Default (other than an Event of Default with respect to Cumberland Pharmaceuticals Inc. described in clause (6) above) with respect to the debt securities of any series at the time Outstanding occurs and is continuing, either the applicable Trustee or the Holders of at least 25% in principal amount of the Outstanding

Table of Contents

debt securities of that series by notice as provided in the Indenture may declare the principal amount of the debt securities of that series (or, in the case of any debt security that is an Original Issue Discount Security, such portion of the principal amount of such debt security as may be specified in the terms of such debt security) to be due and payable immediately. If an Event of Default with respect to Cumberland Pharmaceuticals Inc. described in clause (6) above with respect to the debt securities of any series at the time Outstanding occurs, the principal amount of all the debt securities of that series (or, in the case of any such Original Issue Discount Security, such specified amount) will automatically, and without any action by the applicable Trustee or any Holder, become immediately due and payable. After any such acceleration, but before a judgment or decree based on acceleration, the Holders of a majority in principal amount of the Outstanding debt securities of that series may, under certain circumstances, rescind and annul such acceleration if all Events of Default, other than the non-payment of accelerated principal (or other specified amount), have been cured or waived as provided in the applicable Indenture (Section 502). For information as to waiver of defaults, see "—Modification and Waiver" below.

A default under other indebtedness of the Company will not be a default under the Indentures and a default under one series of debt securities will not necessarily be a default under another series. Any additions, deletions or other changes to the Events of Default which will apply to a series of debt securities will be described in the prospectus supplement relating to such series of debt securities.

Under the Indentures, the trustee must give to the holders of each series of debt securities notice of all uncured defaults known to it with respect to such series within 90 days after such a default occurs (the term default to include the events specified above without notice or grace periods). However, except in the case of default in the payment of principal of, any premium on, or any interest on any of the debt securities, or default in the payment of any sinking or purchase fund installment or analogous obligations, the trustee shall be protected in withholding such notice if it in good faith determines that the withholding of such notice is in the interests of the holders of the debt securities of such series (Section 602).

Subject to the provisions of the Indentures relating to the duties of the Trustees in case an Event of Default has occurred and is continuing, each Trustee will be under no obligation to exercise any of its rights or powers under the applicable Indenture at the request or direction of any of the Holders, unless such Holders have offered to such Trustee reasonable indemnity (Section 603). Subject to such provisions for the indemnification of the Trustees, the Holders of a majority in principal amount of the Outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the debt securities of that series (Section 512).

No Holder of a debt security of any series will have any right to institute any proceeding with respect to the applicable Indenture, or for the appointment of a receiver or a trustee, or for any other remedy thereunder, unless:

(1) such Holder has previously given to the Trustee under the applicable Indenture written notice of a continuing Event of Default with respect to the debt securities of that series;

(2) the Holders of at least 25% in principal amount of the Outstanding debt securities of that series have made written request, and such Holder or Holders have offered reasonable indemnity, to the Trustee to institute such proceeding as trustee; and

(3) the Trustee has failed to institute such proceeding, and has not received from the Holders of a majority in principal amount of the Outstanding debt securities of that series a direction inconsistent with such request, within 60 days after such notice, request and offer (Section 507).

However, such limitations do not apply to a suit instituted by a Holder of a debt security for the enforcement of payment of the principal of or any premium or interest on such debt security on or after the applicable due date specified in such debt security or, if applicable, to convert such debt security (Section 508).

We will be required to furnish to each Trustee annually a statement by certain of our officers as to whether or not we, to their knowledge, are in default in the performance or observance of any of the terms, provisions and conditions of the applicable Indenture and, if so, specifying all such known defaults (Section 1004).

Modification and Waiver

We and the trustee may, without the consent of the holders of the debt securities, enter into one or more Supplemental Indentures for, among others, one or more of the following purposes, provided that in the case of clauses (2), (3), (4) and (6), the interests of the holders of debt securities would not be adversely affected:

- (1) to evidence the succession of another corporation to us, and the assumption by such successor of our obligations under the applicable Indenture and the debt securities of any series;
- (2) to add covenants by us, or surrender any of our rights conferred by the applicable Indenture, for the benefit of the holders of debt securities of any or all series;
- (3) to cure any ambiguity, omission, defect or inconsistency in or make any other provision with respect to questions arising under the applicable Indenture;
- (4) to establish the form or terms of any series of debt securities, including any subordinated securities;
- (5) to evidence and provide for the acceptance of any successor trustee with respect to one or more series of debt securities or to facilitate the administration of the trusts thereunder by one or more trustees in accordance with the applicable Indenture; and
- (6) to provide any additional Events of Default (Section 901).

Modifications and amendments of an Indenture may be made by us, the Subsidiary Guarantors, if applicable, and the applicable Trustee with the consent of the Holders of a majority in principal amount of the Outstanding debt securities of each series affected by such modification or amendment; provided, however, that no such modification or amendment may, without the consent of the Holder of each Outstanding debt security affected thereby:

- (1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any debt security;
- (2) reduce the principal amount of, or any premium or interest on, any debt security;
- (3) reduce the amount of principal of an Original Issue Discount Security or any other debt security payable upon acceleration of the Maturity thereof;
- (4) change the place or currency of payment of principal of, or any premium or interest on, any debt security;
- (5) impair the right to institute suit for the enforcement of any payment due on or any conversion right with respect to any debt security;
- (6) modify the subordination provisions in the case of subordinated debt securities, or modify any conversion provisions, in either case in a manner adverse to the Holders of the subordinated debt securities;
- (7) reduce the percentage in principal amount of Outstanding debt securities of any series, the consent of whose Holders is required for modification or amendment of the Indenture;
- (8) reduce the percentage in principal amount of Outstanding debt securities of any series necessary for waiver of compliance with certain provisions of the Indenture or for waiver of certain defaults; or
- (9) modify such provisions with respect to modification, amendment or waiver (Section 902).

Table of Contents

The Holders of a majority in principal amount of the Outstanding debt securities of any series may waive compliance by us with certain restrictive provisions of the applicable Indenture (Section 1009). The Holders of a majority in principal amount of the Outstanding debt securities of any series may waive any past default under the applicable Indenture, except a default in the payment of principal, premium or interest and certain covenants and provisions of the Indenture which cannot be amended without the consent of the Holder of each Outstanding debt security of such series (Section 513).

Each of the Indentures provides that in determining whether the Holders of the requisite principal amount of the Outstanding debt securities have given or taken any direction, notice, consent, waiver or other action under such Indenture as of any date:

(1) the principal amount of an Original Issue Discount Security that will be deemed to be Outstanding will be the amount of the principal that would be due and payable as of such date upon acceleration of maturity to such date;

(2) if, as of such date, the principal amount payable at the Stated Maturity of a debt security is not determinable (for example, because it is based on an index), the principal amount of such debt security deemed to be Outstanding as of such date will be an amount determined in the manner prescribed for such debt security; and

(3) the principal amount of a debt security denominated in one or more foreign currencies or currency units that will be deemed to be Outstanding will be the United States-dollar equivalent, determined as of such date in the manner prescribed for such debt security, of the principal amount of such debt security (or, in the case of a debt security described in clause (1) or (2) above, of the amount described in such clause).

Certain debt securities, including those owned by us or any of our other Affiliates, will not be deemed to be Outstanding (Section 101).

Except in certain limited circumstances, we will be entitled to set any day as a record date for the purpose of determining the Holders of Outstanding debt securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the applicable Indenture, in the manner and subject to the limitations provided in the Indenture. In certain limited circumstances, the Trustee will be entitled to set a record date for action by Holders. If a record date is set for any action to be taken by Holders of a particular series, only persons who are Holders of Outstanding debt securities of that series on the record date may take such action. To be effective, such action must be taken by Holders of the requisite principal amount of such debt securities within a specified period following the record date. For any particular record date, this period will be 180 days or such other period as may be specified by us (or the Trustee, if it set the record date), and may be shortened or lengthened (but not beyond 180 days) from time to time (Section 104).

Satisfaction and Discharge

Each Indenture will be discharged and will cease to be of further effect as to all Outstanding debt securities of any series issued thereunder, when:

(1) either:

(a) all Outstanding debt securities of that series that have been authenticated (except lost, stolen or destroyed debt securities that have been replaced or paid and debt securities for whose payment money has theretofore been deposited in trust and thereafter repaid to us) have been delivered to the Trustee for cancellation; or

(b) all outstanding debt securities of that series that have not been delivered to the Trustee for cancellation have become due and payable or will become due and payable at their Stated Maturity within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee and in any

case we have irrevocably deposited with the Trustee as trust funds money in an amount sufficient, without consideration of any reinvestment of interest, to pay the entire indebtedness of such debt securities not delivered to the Trustee for cancellation, for principal, premium, if any, and accrued interest to the Stated Maturity or redemption date;

(2) we have paid or caused to be paid all other sums payable by us under the Indenture with respect to the debt securities of that series; and

(3) we have delivered an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge of the Indenture with respect to the debt securities of that series have been satisfied (Article Four).

Legal Defeasance and Covenant Defeasance

If and to the extent indicated in the applicable prospectus supplement, we may elect, at our option at any time, to have the provisions of Section 1502, relating to defeasance and discharge of indebtedness, which we call "legal defeasance" or Section 1503, relating to defeasance of certain restrictive covenants applied to the debt securities of any series, or to any specified part of a series, which we call "covenant defeasance" (Section 1501).

Legal Defeasance. The Indentures provide that, upon our exercise of our option (if any) to have Section 1502 applied to any debt securities, we will be discharged from all our obligations, and, if such debt securities are subordinated debt securities, the provisions of the Subordinated Indenture relating to subordination will cease to be effective, with respect to such debt securities (except for certain obligations to convert, exchange or register the transfer of debt securities, to replace stolen, lost or mutilated debt securities, to maintain paying agencies and to hold moneys for payment in trust) upon the deposit in trust for the benefit of the Holders of such debt securities of money or United States Government Obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and any premium and interest on such debt securities on the respective Stated Maturities in accordance with the terms of the applicable Indenture and such debt securities. Such defeasance or discharge may occur only if, among other things:

(1) we have delivered to the applicable Trustee an Opinion of Counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that Holders of such debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and legal defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and legal defeasance were not to occur;

(2) no Event of Default or event that with the passing of time or the giving of notice, or both, shall constitute an Event of Default shall have occurred and be continuing at the time of such deposit or, with respect to any Event of Default described in clause (6) under "—Events of Default," at any time until 121 days after such deposit;

(3) such deposit and legal defeasance will not result in a breach or violation of, or constitute a default under, any agreement or instrument to which we are a party or by which we are bound;

(4) in the case of subordinated debt securities, at the time of such deposit, no default in the payment of all or a portion of principal of (or premium, if any) or interest on any of our Senior Debt shall have occurred and be continuing, no event of default shall have resulted in the acceleration of any of our Senior Debt and no other event of default with respect to any of our Senior Debt shall have occurred and be continuing permitting after notice or the lapse of time, or both, the acceleration thereof; and

(5) we have delivered to the Trustee an Opinion of Counsel to the effect that such deposit shall not cause the Trustee or the trust so created to be subject to the Investment Company Act of 1940 (Sections 1502 and 1504).

Covenant Defeasance. The Indentures provide that, upon our exercise of our option (if any) to have Section 1503 applied to any debt securities, we may omit to comply with certain restrictive covenants (but not to conversion, if applicable), including those that may be described in the applicable prospectus supplement, the occurrence of certain Events of Default, which are described above in clause (5) (with respect to such restrictive covenants) and clause (6) (with respect only to Significant Subsidiaries) under "Events of Default" and any that may be described in the applicable prospectus supplement, will not be deemed to either be or result in an Event of Default and, if such debt securities are subordinated debt securities, the provisions of the Subordinated Indenture relating to subordination will cease to be effective, in each case with respect to such debt securities. In order to exercise such option, we must deposit, in trust for the benefit of the Holders of such debt securities, money or United States Government Obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and any premium and interest on such debt securities on the respective Stated Maturities in accordance with the terms of the applicable Indenture and such debt securities. Such covenant defeasance may occur only if we have delivered to the applicable Trustee an Opinion of Counsel that in effect says that Holders of such debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance were not to occur, and the requirements set forth in clauses (2), (3), (4) and (5) above are satisfied. If we exercise this option with respect to any debt securities and such debt securities were declared due and payable because of the occurrence of any Event of Default, the amount of money and United States Government Obligations so deposited in trust would be sufficient to pay amounts due on such debt securities at the time of their respective Stated Maturities but may not be sufficient to pay amounts due on such debt securities upon any acceleration resulting from such Event of Default. In such case, we would remain liable for such payments (Sections 1503 and 1504).

If we exercise either our legal defeasance or covenant defeasance option, any Subsidiary Guarantees will terminate (Section 1304).

Notices

Notices to Holders of debt securities will be given by mail to the addresses of such Holders as they may appear in the Security Register (Sections 101 and 106).

Title

We, the Subsidiary Guarantors, the Trustees and any agent of us, the Subsidiary Guarantors or a Trustee may treat the Person in whose name a debt security is registered as the absolute owner of the debt security (whether or not such debt security may be overdue) for the purpose of making payment and for all other purposes (Section 308).

Governing Law

The Indentures and the debt securities will be governed by, and construed in accordance with, the law of the State of Tennessee (Section 112).

DETERMINATION OF OFFERING PRICE

We will offer the securities in amounts, at prices and on terms to be determined by market conditions at the time of the offerings.

PLAN OF DISTRIBUTION

We may sell securities from time to time pursuant to underwritten public offering, negotiated transactions, block trades or a combination of these methods in the United States through underwriters or dealers, directly to purchasers or through agents or in ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers. The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

To the extent required by applicable law, a prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters or agents;
- the purchase price of the securities and, if the purchase price is not payable in U.S. dollars, the currency or composite currency in which the purchase price is payable;
- the net proceeds to us from the sale of the common stock;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- the initial public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- any commissions paid to agents.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent may compensate the underwriter in the form of underwriting discounts or commissions.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Table of Contents

Any common stock will be listed on the Nasdaq Global Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate proceeds of the offering.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

The validity of the securities will be passed upon for us by Adams and Reese LLP. Legal counsel to any underwriters may pass upon legal matters for such underwriters.

EXPERTS

The consolidated financial statements and schedule of Cumberland Pharmaceuticals Inc. and subsidiaries as of December 31, 2016 and 2015, and for each of the years in the three-year period ended December 31, 2016 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus constitutes a part of a registration statement on Form S-3 we filed with the SEC under the Securities Act. This prospectus does not contain all the information set forth in the registration statement and exhibits thereto, and statements included in this prospectus as to the content of any contract or other document referred to are not necessarily complete. For further information, please review the registration statement and the exhibits and schedules filed with the registration statement.

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and we file reports, proxy statements and other information with the SEC in accordance with the Exchange Act. These reports, proxy statements and other information can be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 on official business days during the hours of 10 a.m. to 3 p.m. In addition, materials we filed electronically with the SEC are available at the SEC's website at <u>http://www.sec.gov</u>. The SEC's website contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Information about the operation of the SEC's Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. Copies of certain information filed by us with the SEC are also available on our website at <u>www.cumberlandpharma.com</u>. Our website is not a part of this prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus and the applicable prospectus supplement. We have not authorized anyone else to provide you with additional or different information. We may only use this prospectus to sell securities if it is accompanied by a prospectus supplement. We are only offering these securities in states where the offer is permitted. You should not assume that the information in this prospectus or the applicable prospectus supplement is accurate as of any date other than the dates on the front of these documents.

INFORMATION INCORPORATED BY REFERENCE

We are incorporating by reference in this prospectus the documents that we file with the SEC. This means that we are disclosing important information to you by referring to these filings. The information we incorporate by reference is considered a part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede this information.

Any statement contained in a document incorporated or considered to be incorporated by reference in this prospectus shall be considered to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that is considered to be incorporated by reference in this prospectus modifies or supersedes such statement.

We incorporate by reference the following documents that we have filed with the SEC:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 13, 2017, including information specifically
 incorporated by reference into our Form 10-K from our Proxy Statement for our Annual Meeting of Shareholders held on April 25, 2017;
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 15, 2017;
- Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed on August 9, 2017;
- Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed on November 8, 2017;
- Current Report on Form 8-K and 8-K/A filed with the SEC on January 13, 2017, January 20, 2017, February 3, 2017, February 10, 2017, March 16, 2017, March 22, 2017, March 31, 2017, April 28, 2017 (two reports), May 15, 2017, July 10, 2017, August 1, 2017, August 2, 2017, August 9, 2017, August 11, 2017, September 29, 2017, November 8, 2017, December 8, 2017; and

• The description of the Company's common stock contained in its registration statement on Form 8-A filed on August 1, 2007, and any amendment or report subsequently filed for the purpose of updating such description.

In addition, we incorporate by reference into this prospectus (i) all other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since December 31, 2016, except for information furnished under Form 8-K which is not deemed filed and not incorporated herein by reference, (ii) all documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus and before we have sold all of the common stock to which the prospectus relates or the offering is otherwise terminated and (iii) all documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the information that has been incorporated in this prospectus by reference but not delivered with this prospectus. Requests for copies should be directed to Cumberland Pharmaceuticals Inc., ATTN: Investor Relations, 2525 West End Avenue, Suite 950, Nashville, Tennessee 37203, telephone (615) 255-0068.

Table of Contents

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated January 8, 2018.

PROSPECTUS

Up to \$25,000,000 of Shares

CUMBERLAND PHARMACEUTICALS INC.

Common Stock

We have entered into a sales agreement with B. Riley FBR, Inc. or B. Riley FBR, relating to shares of our common stock offered by this prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$25,000,000 from time to time through B. Riley FBR acting as our agent.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act. B. Riley FBR will act as sales agent on a best efforts basis and will use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between B. Riley FBR and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

B. Riley FBR will be entitled to compensation of 3.0% of the gross sales price per share sold. In connection with the sale of our common stock on our behalf, B. Riley FBR will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of B. Riley FBR will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to B. Riley FBR with respect to certain liabilities, including liabilities under the Securities Act.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE "<u>RISK FACTORS</u>" ON PAGE S-5 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

Our common stock is listed on the Nasdaq Global Market under the symbol "CPIX." On December 13, 2017, the last reported sale price of our common stock on the Nasdaq Global Market was \$7.48 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

B. RILEY FBR

The date of this prospectus is January , 2018.

TABLE OF CONTENTS

	Page
ABOUT THIS SALES AGREEMENT PROSPECTUS	S-1
SALES AGREEMENT PROSPECTUS SUMMARY	S-3
RISK FACTORS	S-5
USE OF PROCEEDS	S-6
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-7
DILUTION	S-8
PLAN OF DISTRIBUTION	S-9
LEGAL MATTERS	S-10
EXPERTS	S-10
WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE	S-11

ABOUT THIS SALES AGREEMENT PROSPECTUS

This sales agreement prospectus is part of a registration statement that we have filed with the U.S. Securities and Exchange Commission, or the SEC, utilizing a "shelf registration process. By using a shelf registration statement, we may offer shares of our common stock having an aggregate offering price of up to \$25,000,000.00 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering.

We provide information to you about this offering of shares of our common stock in two separate documents that are bound together: (1) this sales agreement prospectus, which describes the specific details regarding this offering; and (2) the accompanying base prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this "prospectus," we are referring to both documents combined. If information in this sales agreement prospectus is inconsistent with the accompanying base prospectus, you should rely on the information in this prospectus. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and B. Riley FBR has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and B. Riley FBR is not, making an offer to sell or soliciting an offer to buy our securities in any jurisdiction where an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus, the documents incorporated by reference into this prospectus, and in any free writing prospectus that we may authorize for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance

You should read this prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus entitled "Where You Can Find More Information" and "Incorporation by Reference."

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by

this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

When we refer to "Cumberland," "we," "our," "us" and the "Company" in this prospectus, we mean Cumberland Pharmaceuticals Inc. and its consolidated subsidiaries, unless otherwise specified. When we refer to "you," we mean the holders of the applicable series of securities.

We have some of our trademarks, service marks used in this prospectus. This prospectus may also include trademarks, tradenames, and service marks that are the property of other organizations. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the [®] and TM symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

SALES AGREEMENT PROSPECTUS SUMMARY

This summary provides a general overview of selected information and does not contain all of the information you should consider before buying our common stock. Therefore, you should read the entire prospectus and any free writing prospectus that we have authorized for use in connection with this offering carefully, including the information incorporated by reference, before deciding to invest in our common stock. Investors should carefully consider the information set forth under "Risk Factors" beginning on page S-5 of this prospectus and incorporated by reference to our annual report on Form 10-K and our quarterly reports on Form 10-Q.

Cumberland 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.

We are a Tennessee corporation. Our principal executive offices are located at 2525 West End Avenue, Suite 950, Nashville, Tennessee 37203. Our telephone number is (615) 255-0068. We maintain a website at <u>www.cumberlandpharma.com</u>, which contains information about us. Our website and the information contained on it and connected to it will not be deemed incorporated by reference into this prospectus.

The Offering		
Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$25,000,000.00.	
Manner of offering	"At the market offering" that may be made from time to time through our sales agent, B. Riley FBR. See "Plan of Distribution" on page S-9.	
Use of Proceeds	We intend to use the net proceeds, if any, from this offering for working capital and general corporate purposes, including research and development expenses and capital expenditures. See "Use of Proceeds" on page S-6.	
Risk Factors	You should read the "Risk Factors" section of this prospectus and in the documents incorporated by reference in this prospectus for a discussion of factors to consider before deciding to purchase shares of our common stock.	
Symbol on The NASDAQ Global Market	"CPIX"	

The number of shares of common stock to be outstanding after this offering is based on 15,781,736 shares of common stock outstanding as of September 30, 2017 and excludes the following:

- 7,500 shares of common stock at \$17.00 per share that expire in July 2019. All of these warrants were outstanding and exercisable as of September 30, 2017.
- 5,800 options outstanding and exercisable at \$13.00 per share as of September 30, 2017. These options outstanding will all expire before the end of February 2019.
- 768,545 nonvested shares of restricted stock issued under 2007 Plan and the Directors' Plan.

Unless otherwise stated, all information contained in this prospectus reflects an assumed public offering price of \$7.48 per share, which was the last reported sale price of our common stock on The NASDAQ Global Market on December 13, 2017.

RISK FACTORS

You should consider carefully the risks described below and discussed under the section captioned "Risk Factors" contained in our annual report on Form 10-K for the year ended December 31, 2016 and in our quarterly reports for the quarterly periods ended March 31, 2017, June 30, 2017 and September 30, 2017 as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act, each of which is incorporated by reference in this prospectus in its entirety, together with other information in this prospectus, and the information and documents incorporated by reference in this prospectus, and any free writing prospectus that we have authorized for use in connection with this offering before you make a decision to invest in our common stock. If any of the following events actually occur, our business, results of operations, financial condition or prospects could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business operations.

Additional Risks Relating to this Offering

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. We intend to use the net proceeds, if any, from this offering for working capital and general corporate purposes, including research and development expenses and capital expenditures. However, we have not determined the specific allocation of the net proceeds among these potential uses. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or enhance the value of our common stock.

You may experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

The price per share of our common stock being offered may be higher than the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 3,332,219 shares are sold at a price of \$7.48 per share, the last reported sale price of our common stock on The NASDAQ Global Market on December 13, 2017, for aggregate proceeds of up to \$25,000,000 in this offering, and after deducting commissions and estimated aggregate offering expenses payable by us, you will suffer immediate and substantial dilution of \$3.91 per share, representing the difference between the as adjusted net tangible book value per share of our common stock as of September 30, 2017 after giving effect to this offering and the assumed offering price. See the section entitled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$25 million from time to time. The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with B. Riley FBR as a source of financing. We intend to use the net proceeds, if any, from this offering for working capital and general corporate purposes, including research and development expenses and capital expenditures.

The amounts and timing of our actual expenditures will depend on numerous factors, as well as the amount of cash used in our operations. We therefore cannot estimate with certainty the amount of net proceeds to be used for the purposes described above. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any prospectus supplement, including the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- legislative, regulatory, or other changes in the healthcare industry at the local, state, federal or international level which increases the costs of, or otherwise affect our operations;
- changes in reimbursement available to us by government or private payers, including changes in Medicare and Medicaid payment levels and availability of third-party insurance coverage;
- competition; and
- changes in national or regional economic conditions, including changes in interest rates and availability and cost of capital to us.
- our financial performance;
- developments relating to our competitors and the industry; and
- other risks and uncertainties, including those listed under the section titled "Risk Factors."

You should read this prospectus and the documents incorporated by reference herein completely and with the understanding that our actual results may differ materially from what we expect as expressed or implied by our forward-looking statements. In light of the significant risks and uncertainties to which our forward-looking statements are subject, you should not place undue reliance on or regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. We discuss many of these risks in greater detail in the documents incorporated by reference herein, including under the heading "Risk Factors." These forward-looking statements represent our estimates and assumptions only as of the dates of this prospectus and the documents incorporated by reference herein, and any free writing prospectus, as applicable, regardless of the time of delivery of this prospectus or any sale of our common stock and, except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this prospectus. For all forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

S-7

DILUTION

Our net tangible book value as of September 30, 2017 was approximately \$43.4 million, or \$2.75 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of September 30, 2017. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering.

After giving effect to the sale of our common stock in the aggregate amount of \$25 million in this offering at an assumed offering price of \$7.48, the last reported sale price of our common stock on The NASDAQ Global Market on December 13, 2017, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2017 would have been approximately \$68.3 million, or \$3.57 per share. This represents an immediate increase in net tangible book value of \$0.82 per share to existing stockholders and immediate dilution in net tangible book value of \$3.91 per share to new investors purchasing our common stock in this offering. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share		\$7.48
Net tangible book value per share as of September 30, 2017	\$2.75	
Increase per share attributable to new investors	0.82	
As adjusted net tangible book value per share after this offering		3.57
Dilution per share to new investors		3.91

The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$7.48 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$25 million is sold at that price, would increase our as adjusted net tangible book value per share after the offering to \$3.65 per share and would increase the dilution in net tangible book value per share to new investors to \$5.10 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$7.48 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$25 million is sold at that price, would cause our as adjusted net tangible book value per share after the offering to be \$3.48 per share and would decrease the dilution in net tangible book value per share to new investors to \$3.00 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

To the extent that outstanding options or warrants are exercised or outstanding restricted stock units vest, investors purchasing our common stock in this offering will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The above discussion and table are based on 15,781,736 shares of common stock outstanding as of September 30, 2017, and exclude as of that date:

- 7,500 shares of common stock at \$17.00 per share that expire in July 2019. All of these warrants were outstanding and exercisable as of September 30, 2017.
- 5,800 options outstanding and exercisable at \$13.00 per share as of September 30, 2017. These options outstanding will all expire before the end of February 2019.
- 768,545 nonvested shares of restricted stock issued under the 2007 Plan and Directors' Plan.

S-8

PLAN OF DISTRIBUTION

We have entered into the sales agreement with B. Riley FBR under which we may issue and sell our common stock from time to time through B. Riley FBR acting as sales agent. Sales of shares of our common stock, if any, under this prospectus may be made by any method that is deemed an "at the market offering" as defined in Rule 415 promulgated under the Securities Act. We may instruct B. Riley FBR not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or B. Riley FBR may suspend the offering of common stock upon notice and subject to other conditions.

B. Riley FBR will offer our common stock subject to the terms and conditions of the sales agreement as agreed upon by us and B. Riley FBR. Each time we wish to issue and sell common stock under the sales agreement, we will notify B. Riley FBR of the number of shares to be issued, the time period during which such sales are requested to be made, any limitation on the number of shares that may be sold in one day, any minimum price below which sales may not be made and other sales parameters as we deem appropriate. Once we have so instructed B. Riley FBR, unless B. Riley FBR declines to accept the terms of the notice, B. Riley FBR has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of B. Riley FBR under the sales agreement to sell our common stock are subject to a number of conditions that we must meet.

We will pay B. Riley FBR commissions for its services in acting as agent in the sale of common stock at a commission rate equal to 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse B. Riley FBR for certain specified expenses, including the fees and disbursements of its legal counsel in an amount not to exceed \$35,000. We estimate that the total expenses for the offering, excluding commissions and reimbursements payable to B. Riley FBR under the terms of the sales agreement, will be approximately \$114,850.

Settlement for sales of common stock will generally occur on the second business day following the date on which any sales are made, or on some other date that is agreed upon by us and B. Riley FBR in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of the common stock on our behalf, B. Riley FBR will be an "underwriter" within the meaning of the Securities Act and the compensation of B. Riley FBR will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to B. Riley FBR against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all of our common stock subject to the sales agreement or (ii) termination of the sales agreement as provided therein.

B. Riley FBR and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees.



LEGAL MATTERS

Adams and Reese LLP will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Cumberland Pharmaceuticals, Inc. B. Riley FBR is being represented in connection with this offering by Duane Morris LLP.

EXPERTS

The consolidated financial statements of Cumberland Pharmaceuticals, Inc. incorporated in this prospectus by reference from Cumberland Pharmaceuticals, Inc.'s Annual Report on Form 10-K, have been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

S-10

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is http://www.sec.gov.

Our web site address is <u>www.cumberlandpharma.com</u>. The information on our web site, however, is not, and should not be deemed to be, a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. You may inspect a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C. or through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus, between the date of this prospectus and the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed "filed" with the SEC, including our Compensation Committee report and performance graph or any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 13, 2017, including information specifically incorporated by reference into our Form 10-K from our Proxy Statement for our Annual Meeting of Shareholders held on April 25, 2017;
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 15, 2017;
- Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed on August 9, 2017;
- Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed on November 8, 2017;
- Current Report on Form 8-K and 8-K/A filed with the SEC on January 13, 2017, January 20, 2017, February 3, 2017, February 10, 2017, March 16, 2017, March 22, 2017, March 31, 2017, April 28, 2017 (two reports), May 15, 2017, July 10, 2017, August 1, 2017, August 2, 2017, August 9, 2017, August 11, 2017, September 29, 2017, November 8, 2017, December 8, 2017; and
- The description of the Company's common stock contained in its registration statement on Form 8-A filed on August 1, 2007, and any
 amendment or report subsequently filed for the purpose of updating such description.



All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us. Requests for copies should be directed to Cumberland Pharmaceuticals Inc., ATTN: Investor Relations, 2525 West End Avenue, Suite 950, Nashville, Tennessee 37203, telephone (615) 255-0068. Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus and any accompanying prospectus supplement.

Up to \$25,000,000 of Shares

CUMBERLAND PHARMACEUTICALS INC.

Common Stock

PROSPECTUS

B. Riley FBR

, 2018

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.*

The following table sets forth all expenses payable by Cumberland Pharmaceuticals Inc. (sometimes referred to as the "Company" in this Part II of the registration statement) in connection with the issuance and distribution of the securities.

SEC registration fee	\$ 12,450
FINRA Fee	15,500
Legal fees and expenses	32,000
Accounting fees and expenses	35,000
Transfer agent and registrar fees and expenses	5,000
Printing expenses	5,000
Miscellaneous expenses	10,000
Total	\$ 114,950

* Other than the SEC registration fee and FINRA Fee, all amounts set forth above are estimates.

Item 15. Indemnification of Directors and Officers.

Under Tennessee law, a corporation shall indemnify a director or officer against expenses, including attorneys' fees, actually and reasonably incurred by him, to the extent the director or officer has been successful on the merits or otherwise in defense of any action, suit or proceeding. A corporation may indemnify a director or officer who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with the action, suit or proceeding. Excepted from that immunity are:

- a willful failure to deal fairly with the company or its shareholders in connection with a matter in which the director has a material conflict
 of interest;
- a violation of criminal law (unless the director had reasonable cause to believe that his or her conduct was lawful or no reasonable cause to believe that his or her conduct was unlawful);
- a transaction from which the director derived an improper personal profit; and
- willful misconduct.

Our Second Amended and Restated Bylaws include an indemnification provision under which we have the power to indemnify our directors, officers and former officers and directors (including heirs and personal representatives) against all costs, charges and expenses actually and reasonably incurred, including an amount paid to settle an action or satisfy a judgment to which the director or officer is made a party by reason of being or having been a director or officer of Cumberland Pharmaceuticals Inc. or any of our subsidiaries.

Our Second Amended and Restated Bylaws also provide that our directors may cause us to purchase and maintain insurance for the benefit of a person who is or was serving as a director, officer, employee or agent of Cumberland Pharmaceuticals or any of our subsidiaries (including heirs and personal representatives) against a liability incurred by him or her as our director, officer, employee or agent.

ITEM 16. Exhibits and Financial Statement Schedules.

(a) A list of the exhibits required by Item 601 of Regulation S-K to be filed as a part of this registration statement is set forth in the Index to Exhibits on page II-8, which immediately precedes such exhibits.



ITEM 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that:

Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purposes of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or deemed incorporated by reference into the registration statement or prospectus that is

II-2

part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

II-3

INDEX TO EXHIBITS

Exhibit Number	Description
1.1**	—At Market Issuance Sales Agreement between the Company and B. Riley FBR, Inc. dated November 7, 2017 (Previously filed as Exhibit 1.1 to Company's Registration Statement on Form S-3 filed on November 7, 2017 (File No. 333-221402))
4.1**	<u>—Specimen form of the Company's Common Stock Certificate (Previously filed as Exhibit 4.1 to Form S-1/A filed on August 6, 2007) (File No. 333-142535)</u>
4.2**	Preferred Stock Terms, Rights, and Provisions
4.3**	—Form of Senior Indenture (filed as Exhibit 4.2 to Form S-3 filed on November 7, 2017)
4.4**	—Form of Subordinated Indenture (filed as Exhibit 4.3 to Form S-3 filed on November 7, 2017)
4.5*	—Form of Warrant Agreement
4.6*	—Form of Warrant Certificate
4.7*	—Form of Debt Securities
5.1***	<u>—Opinion of Adams & Reese, LLP</u>
12.1**	
23.1***	Consent of KPMG LLP, Independent Registered Public Accounting Firm
23.2***	

24.1** -Power of Attorney of the Officers and Directors of Cumberland Pharmaceuticals Inc. (included on the signature page)

To be filed by amendment or as an exhibit to a current report on Form 8-K of the registrant. *

** Previously filed ***

Filed herewith

II-4

Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Amendment No. 2 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Nashville, Tennessee, on the 8th day of January 2018.

CUMBERLAND PHARMACEUTICALS INC.

BY: /s/ A.J. Kazimi

A.J. Kazimi

Chairman of the Board and Chief Executive Officer

Power of Attorney

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 2 to the Registration Statement has been signed below by the following persons in the capacities indicated below on the 8th day of January 2018.

Signature	Title
/s/ A.J. Kazimi	Chairman of the Board and Chief Executive Officer
A.J. Kazimi	(Principal Executive Officer)
/s/ Michael P. Bonner	Chief Financial Officer
Michael P. Bonner	(Principal Financial Officer and Principal Accounting Officer)
/s/ Joey A. Jacobs*	Director
Joey A. Jacobs	
/s/ Martin E. Cearnal*	Director and Chief Commercial Officer
Martin E. Cearnal	
/s/ Gordon R. Bernard, M.D.*	Director
Gordon R. Bernard, M.D.	
/s/ Jonathan I. Griggs*	Director
Jonathan I. Griggs	

Signature	
/s/ James R. Jones*	Director
James R. Jones	
/s/ Caroline R. Young*	Director
Caroline R. Young	
/s/ Kenneth J. Krogulski*	Director

Kenneth J. Krogulski

*Signed by A.J. Kazimi, in his capacity as power of attorney

Title

ADAMS AND REESE LLP

January 8, 2018

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

Ladies and Gentlemen:

We have acted as counsel for Cumberland Pharmaceuticals Inc., a Tennessee corporation (the "Company"), in connection with the preparation of the Company's Registration Statement on Form S-3 filed on November 7, 2017, and Amendment No. 1 and 2 filed on December 19, 2017 and January 8, 2018, respectively, (the "Registration Statement") with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the offer and sale, from time to time, pursuant to Rule 415 under the Securities Act, of (i) shares of common stock, no par value of the Company ("Common Stock"), (ii) shares of preferred stock, no par value, of the Company (the "Preferred Stock"), (iii) warrants for the purchase of Common Stock and Preferred Stock (the "Securities Warrants"), and (iv) unsecured debt securities of the Company, which may be either senior or subordinated and may be issued in one or more series, consisting of notes, debentures or other evidences of indebtedness ("Debt Securities" and together with the Securities Warrants, Preferred Stock and the Common Stock, the "Securities").

We have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement and all exhibits thereto, (ii) the form of senior indenture (the "Senior Indenture") filed or incorporated by reference as an exhibit to the Registration Statement, (iii) the form of subordinated indenture (the "Subordinated Indenture" and, together with the Senior Indenture, the "Indentures") filed or incorporated by reference as an exhibit to the Registration Statement (iv) the specimen Common Stock certificate, and (v) such other certificates, statutes and other instruments and documents as we considered appropriate for purposes of the opinions hereafter expressed.

In making the foregoing examinations, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents submitted to us as certified, conformed or photostatic copies thereof and the authenticity of the originals of such documents.

As to various questions of fact material to the opinions expressed below, we have, without independent third party verification of their accuracy, relied in part, and to the extent we deemed reasonably necessary or appropriate, upon the representations and warranties of the Company contained in such documents, records, certificates, instruments or representations furnished or made available to us by the Company.

In connection with rendering the opinions set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) the Registration Statement and any subsequent amendments (including additional post-effective amendments), will have become effective and comply with all applicable laws; (v) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner specified in the Registration Statement and the applicable Prospectus Supplement; (vi) the applicable Indenture and, if applicable, the related Guarantees will have been duly qualified under the Trust Indenture Act of 1939, as amended; (vii) one or more prospectus supplements to the prospectus contained in the Registration Statement will have been prepared and filed with the Commission describing the Securities offered thereby; (viii) the Indentures, and any supplemental indenture relating to a

Attorneys at Law Alabama Florida Louisiana Mississippi South Carolina Tennessee Texas Washington, DC

Phillip Buffington, Jr. Direct 601.292.0745 E-Fax: 601.944.9357 phil.buffington@arlaw.com particular series of Debt Securities, will be duly authorized, executed and delivered by the parties thereto in substantially the form reviewed by us; (ix) a definitive sales agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; and (x) any securities issuable upon conversion, exchange or exercise of any Preferred Stock or Debt Securities being offered will have been duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange or exercise.

Based on the foregoing, and subject to the assumptions, qualifications, limitations, and exceptions set forth herein and having due regard for such legal considerations we deem relevant, we are of the opinion that:

(1) With respect to shares of Common Stock, when both (a) the board of directors (the "Board") of the Company has taken all necessary corporate action to approve the issuance of and the terms of the offering of the shares of Common Stock and related matters and (b) certificates representing the shares of Common Stock have been duly executed, countersigned, registered, and delivered either (i) in accordance with the applicable definitive sales agreement approved by the Board or such designated officers upon payment of the consideration therefor (not less than the par value of the Common Stock) provided for therein or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the consideration approved by the Board (not less than the par value of the Common Stock), then the shares of Common Stock will be legally issued, fully paid, and nonassessable;

(2) With respect to the Preferred Stock when, (a) the Board has taken all necessary corporate action to approve the issuance and terms of the Preferred Stock, the terms of the offering thereof and related matters, including the adoption of a Certificate of Designation relating to the Preferred Stock and the filing of the Certificate of Designation with the Secretary of State of the State of Tennessee, (b) the certificates representing the shares of Preferred Stock have been duly executed, countersigned, registered, and delivered, and (c) upon payment of the consideration therefor provided for in the applicable sales agreement as approved by the Board or such designated officers (not less than the par value of the Preferred Stock), then the Preferred Stock will be legally issued, fully paid, and nonassessable;

(3) With respect to the Securities Warrants, when (a) the Board has taken all necessary corporate action to approve the creation of and the issuance and terms of the Securities Warrants, the terms of the offering thereof, and related matters, (b) the agreements relating to the Securities Warrants have been duly authorized and validly executed and delivered by the Company and the Warrant Agent appointed by the Company, and (c) the Securities Warrants or certificates representing the Securities Warrants have been duly executed, countersigned, registered, and delivered in accordance with the appropriate agreements relating to the Securities Warrants and the applicable definitive sales agreement approved by the Board or such designated officers upon payment of the consideration therefor provided for therein, then the Securities Warrants will be legally issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms; and

(4) When (i) the Board (or a committee thereof) has taken all necessary corporate action to approve the issuance and terms of any such Debt Securities; (ii) the terms of such Debt Securities and of their issuance and sale have been duly established in conformity with the applicable Indenture so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirements or restrictions imposed by any court or governmental body having jurisdiction over the Company; and (iii) such Debt Securities have been duly executed and authenticated in accordance with the applicable Indenture and issued and sold as contemplated in the Registration Statement and upon payment of the consideration for such Debt Securities as provided for in the applicable definitive sales agreement, then such Debt Securities will be legally issued and such Debt Securities will constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as such enforcement is subject to any applicable bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, moratorium and similar laws relating to or affecting creditors' rights generally and to general equitable principles (regardless of whether enforcement is sought in a proceeding in equity or at law).

The opinions expressed herein are limited to the federal securities law of the United States of America and the Tennessee Business Corporation Act (the "Act"), in each case as currently in effect. We are expressing no opinion as to the effect of the laws of any other jurisdiction, domestic or foreign.

This opinion (i) is rendered in connection with the filing of the Registration Statement, (ii) is rendered as of the date hereof, and we undertake no, and hereby disclaim any kind of, obligation to advise you of any change or any new developments that might affect any matters or opinions set forth herein, and (iii) is limited to the matters stated herein and no opinions may be inferred or implied beyond the matters expressly stated herein

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of our Firm's name in the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act and the rules and regulations thereunder.

Very truly yours,

/s/ ADAMS AND REESE LLP Adams and Reese LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors Cumberland Pharmaceuticals, Inc.:

We consent to the use of our report dated March 10, 2017, with respect to the consolidated balance sheets of Cumberland Pharmaceuticals, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive income (loss), equity, cash flows for each of the years in the three-year period ended December 31, 2016, and related financial statement schedule, incorporated herein by reference and to the reference to our firm under the heading "Experts" in the prospectus.

(signed) KPMG LLP

Nashville, Tennessee January 8, 2018