

Annual Report
2017





Cumberland Pharmaceuticals

is a specialty pharmaceutical company founded with a clear mission to advance patient care through the delivery of high-quality medicines. We acquire, develop, and commercialize branded prescription products that are in line with that mission, and we strive to provide innovative products that address poorly met medical needs.

To Our Shareholders, Employees & Partners:



A.J. Kazimi
Chief Executive Officer
Cumberland
Pharmaceuticals

I am pleased to report excellent progress in 2017 in advancing toward our goal of sustainable growth and profitability. Over the past few years, we have taken steps to transform our company. Those efforts have strengthened Cumberland's market presence and diversified our business.

Net revenues in 2017 were \$41 million, an increase of 25% over the prior year. We continued to maintain a strong financial position with \$93 million in total assets and \$50 million in cash and investments at the end of the year.

During 2017, we expanded our commercial product line with the acquisition of the exclusive U.S. rights to Totect® (dexrazoxane hydrochloride) - the second product to emerge from our alliance with the Clinigen Group. Totect is an FDA-approved, hospital based oncology intervention drug, indicated to treat the toxic effects of anthracycline chemotherapy. We launched Totect during a national shortage of dexrazoxane, resulting in strong initial demand for the brand. To support oncology patients during the shortage, we provided emergency shipments of the product to cancer centers and children's hospitals across the country.

Meanwhile, we were pleased to see that both Caldolor® and Vaprisol® were the subject of favorable clinical publications in 2017. One study on Caldolor demonstrated its ability to significantly reduce fever in hospitalized children. Another study provided evidence that Caldolor can significantly improve post-operative pain control, while also significantly reducing opioid use in patients undergoing surgery. Vaprisol was highlighted in a publication as a well-tolerated solution for hyponatremia - a potentially serious condition that continues to be a leading type of electrolyte imbalance seen in hospitalized patients.

In 2017, we also signed and fully implemented a new co-promotion arrangement with Poly Pharmaceuticals, Inc. They're a privately held U.S. specialty pharmaceutical company that began introducing Kristalose® to medical specialties we don't cover. 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 new medical professionals.

“ By design, Cumberland is a very different company today than we were just a few years ago. ”

Cumberland currently markets seven FDA-approved products for sale in the United States.

Our primary target markets are hospital acute care, gastroenterology, and oncology supportive care. We promote our approved products through our hospital and gastroenterology sales forces in the U.S and are establishing a network of international partners to bring our products to patients in their countries.



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

Our clinical pipeline programs continued to advance in 2017. Patient enrollment progressed in our Phase II Vasculan® and Portaban® studies, and we initiated our second Boxaban® study after FDA clearance earlier in the year. All three product candidates address patient conditions for which there is currently no effective treatment.

By design, Cumberland is a very different company today than we were just a few years ago. Our product portfolio has grown, our reach has substantially increased, and our pipeline now addresses several market opportunities in the hundreds of millions of dollars. This diversified strategy has driven our double-digit top line growth over the last year, and our momentum is strong. We are confident that we have put the key pieces in place to help us to deliver on our goals.

Finally, I'd like to acknowledge and thank our team for all their fine efforts, and for doing their part in advancing our mission of improving patient care through the delivery of high-quality pharmaceutical products.

With best wishes,



AJ Kazimi
Chairman and Chief Executive Officer



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



**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).

CPIX Pipeline

The company has continued to take steps to transform Cumberland by adding new products, increasing the number of sales representatives supporting the portfolio, launching new marketing strategies, expanding product labeling, protecting intellectual property, and advancing our clinical pipeline. We have continued to expand our pipeline and have a total of four promising product candidates in development. All four candidates are part of our ifetroban program, with potential to help multiple patient populations. All of our candidates are also designed to treat conditions for which there is currently no FDA - approved pharmaceutical treatment.



Preclinical

IND

Phase 1

Phase 2
Safety PK

Phase 2
Efficacy

Phase 3

NDA

Hepatoren[®]
(hepatorenal syndrome)

**Our
pipeline
of product
candidates
includes:**

Boxaban[®]
(aspirin-exacerbated respiratory disease)

Vasculan[™]
(systemic sclerosis)


Portaban[™]
(portal hypertension)

**Next
Milestone:
New Phase 2
Study Data**

2017 Milestones



Cumberland has been building a foundation upon which to provide long-term, sustainable growth, while continuing our charge to make a difference in the lives of patients. We continue our strategy to build a diversified specialty product portfolio and deliver long-term value to our shareholders, as we remain focused on our mission of advancing patient care through the delivery of high-quality pharmaceutical products.

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- During the year, we expanded our commercial product line with the acquisition of the exclusive U.S. rights to Totect - an oncology support drug and second to emerge from our alliance with the Clinigen Group. Totect is an FDA-approved hospital based emergency oncology intervention drug, indicated to treat the toxic effects of anthracycline chemotherapy. We launched Totect during a national shortage of dexrazoxane, resulting in strong initial demand for the product.
 - We were pleased to see that two of our products were the subject of favorable clinical publications. In early 2017, there were a series of new manuscripts featuring our Caldolor and Vaprisol products. One study on Caldolor demonstrated its ability to significantly reduce fever in hospitalized children. Another study provided evidence that Caldolor can significantly improve post-operative pain control, while also significantly reducing opioid use in patients undergoing surgery. Vaprisol was also highlighted in a publication as a well-tolerated solution for hyponatremic patients.
 - In early 2017, the FDA cleared Cumberland's investigational new drug application for Boxaban - 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. We also continued to advance our Vasculan and Portaban clinical pipeline programs, with patient enrollment progressing in each of those Phase II studies.
 - Additionally, during 2017, we reached agreement with the FDA to collect data on the use of Caldolor in children ranging in age from birth up to six months of age. As a result, a multicenter study is now underway at several United States centers to collect data from twenty-four patients in this age range.
 - During the third quarter 2017, we fully implemented our co-promotion arrangements with Poly Pharmaceuticals, Inc. following a multi-year agreement signed in April 2017. Poly is a privately held U.S. specialty pharmaceutical company that is featuring Kristalose to an expanded number of physicians. Poly's sales organization is more than doubling the number of nationwide physicians called upon with Kristalose. Cumberland continues to manage the national marketing, distribution, and regulatory activities associated with the product.
 - In December 2017 Cumberland was featured in the *Nashville Business Journal* as the fastest growing Nashville health care company of 2017. Nashville is well known for the collection of health care providers that call Music City home, so it was a great honor to receive this feature.

CET Cumberland Emerging Technologies

In order to be successful over the long-term, we believe it is important to have a conduit of innovative new product opportunities. We formed Cumberland Emerging Technologies (CET) for that purpose. CET is a joint initiative between Cumberland Pharmaceuticals Inc., Vanderbilt University, LaunchTN, and Gloria Pharmaceuticals. The mission of CET is to bring biomedical technologies and products conceived at Vanderbilt and other regional research centers to the marketplace.

Through CET, we collaborate with a select group of academic research institutions located in the mid-south region of the U.S. Our business development team is responsible for identifying appropriate CET product candidates and negotiating with our university partners to secure rights to these candidates.

CET currently has collaboration agreements with Universities to co-develop promising biomedical technologies, including: Vanderbilt University, the University of Tennessee and the University of Mississippi. These agreements allow us to play an important role in fostering and shaping early-stage biomedical research to improve patient care and provide CET and Cumberland.

In addition to its partnerships with leading academic centers, CET fosters innovation through the CET Life Sciences Center, a business incubator facility that provides laboratory and office space, equipment, and infrastructure for its own operations and also to early-stage biomedical companies. It provides services tailored to inventor scientists seeking a corporate partner to assist in developing their biomedical technologies, as well as life sciences companies seeking facilities in which to locate their headquarters, grow their businesses and develop their technologies.

“ Our team is working closely with academic research scientists to advance their technologies toward a successful proof of concept. ”

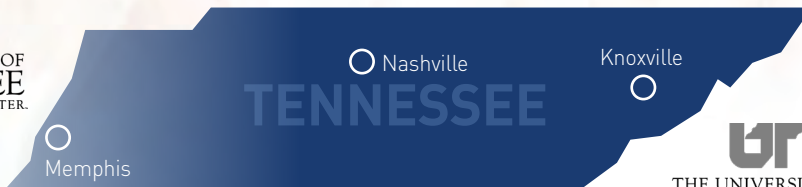
Josh Trantum
Director
Corporate Development
Cumberland Emerging Technologies



VANDERBILT
UNIVERSITY®



THE UNIVERSITY OF
TENNESSEE
HEALTH SCIENCE CENTER.



TENNESSEE

Nashville

Knoxville

Memphis



THE UNIVERSITY OF
TENNESSEE



Oxford, MS



THE UNIVERSITY of
MISSISSIPPI

CET
Collaboration
Partners

Partnerships Around the World

We rely on carefully selected partners for the international distribution and commercialization of our products. Through these arrangements, we are expanding our global impact and bringing our products to patients throughout the world.

Partnering with companies with established infrastructure and capabilities allows us to focus resources on our core capabilities—the acquisition, development and commercialization of innovative prescription products.



- 1 Canada—**
Teligent Inc. is our commercial partner for Caldolor®
- 2 Tennessee—**
Cardinal Health Inc. provides warehousing, shipping and other distribution support for our products in the U.S.
- 3 Venezuela—**
Valmorca is our commercial partner for Caldolor®

- 4 Latin America—**
Grifols International, S.A. is our commercial partner for Caldolor®
- 5 Spain & Portugal—**
Grifols International, S.A. is our commercial partner for Caldolor®



6 Arabian Gulf —

GerminMed is our commercial partner for Caldolor®

7 India—

Sandor Medicaids Pvt. Ltd. is our commercial partner for Caldolor®

8 China—

Harbin Gloria Pharmaceuticals Co. Ltd is our commercial partner for Caldolor® and Acetadote®, as well as an investor in Cumberland Emerging Technologies

9 South Korea—

DB Pharm Korea Co. Ltd. is our commercial partner for Caldolor®

10 Indonesia—

The **PT. ETHICA Group** is our commercial partner for Caldolor®

11 Australia & New Zealand—

Seqirus™, is a CSL Company, is our commercial partner for Caldolor®

Phebra Pty Ltd., is our commercial partner for Acetadote®

Selected Financial Data

(dollars in thousands except per share data)	2013	2014	2015	2016	2017
Net Revenues	\$ 32,027	\$ 36,902	\$ 33,519	\$ 33,026	\$ 41,150
Operating Income (Loss)	(3,801)	3,559	1,112	(1,433)	(4,081)
Operating Margin	(11.9) %	9.6 %	3.3 %	(4.3) %	(9.9) %
Net Income (Loss)	(2,152)	2,362	671	(1,004)	(8,050)
Diluted Earnings (Loss) per Share	(0.11)	0.14	0.04	(0.06)	(0.5)
Total Assets	87,614	95,405	91,919	93,405	93,232
Long-Term Obligations	776	903	2,687	5,491	11,616
Shareholders' Equity	79,292	80,753	76,820	73,248	64,120
Supplemental Financial Measures ⁽¹⁾					
Adjusted Earnings (Loss)	\$ (1,825)	\$ 6,310	\$ 4,477	\$ 1,816	\$ 54
Adjusted Margin	(5.7) %	17.1 %	13.4 %	5.5 %	0.1%
Adjusted Diluted Earnings (Loss) per Share	\$ (0.10)	\$ 0.35	\$ 0.26	\$ 0.11	\$ 0.00

Reconciliation of Net Income (Loss) Attributable to Common Shareholders to Adjusted Earnings and Adjusted Diluted Earnings Per Share ⁽¹⁾ (Unaudited)

(dollars in thousands except per share data)	2013	2014	2015	2016	2017
Net Income (Loss) Attributable to Common Shareholders	\$ (2,105)	\$ 2,424	\$ 731	\$ (945)	\$ 7,979
Less: Net Loss at Subsidiary Attributable to Noncontrolling Interests	47	62	60	59	71
Net Income (Loss)	(2,152)	2,362	671	(1,004)	8,050
Adjustments to Net Income (Loss)					
Income Tax Expense (Benefit)	(1,523)	1,381	576	(331)	4,175
Depreciation and Amortization Expense	1,302	1,990	2,247	2,397	2,648
Share-Based Compensation Expense	675	761	623	852	1,115
Other Adjustments to Net Income ⁽¹⁾	-	-	495	-	372
Interest Income	(230)	(251)	(209)	(204)	(299)
Interest Expense	103	67	74	106	93
Adjusted Earnings	\$ (1,825)	\$ 6,310	\$ 4,477	\$ 1,816	\$ 54
Adjusted Diluted Earnings per Share	\$ (0.10)	\$ 0.35	\$ 0.26	\$ 0.11	\$ 0.00
Diluted Weighted-Average Common Shares Outstanding:	18,333	17,900	17,095	16,559	16,325

(1) The supplemental financial measures are Non-GAAP as defined, the reconciliation of these supplemental measures is above.

Officers and Directors

Board of Directors

A.J. Kazimi

Chairman
Cumberland Pharmaceuticals

Dr. Gordon R. Bernard

Executive Vice President for Research
Vanderbilt University Medical Center

Martin E. Cearnal

Executive Vice President and
Chief Commercial Officer
Cumberland Pharmaceuticals

Jonathan I. Griggs

Former Vice President Human Resources
Warner Lambert Corporation

Joey A. Jacobs

Chairman and Chief Executive Officer
Acadia Healthcare Co. Inc.

James R. Jones

Former Managing Partner
KPMG LLP-Nashville

Kenneth J. Krogulski

President and Chief Investment Officer
Berkshire Asset Management, LLC

Caroline R. Young

Executive Director
NashvilleHealth

Former President
Nashville Health Care Council

Management Team

A.J. Kazimi

Chief Executive Officer

Martin E. Cearnal

Executive Vice President, Marketing & Sales
and Chief Commercial Officer

Leo Pavliv, R.Ph.

Executive Vice President, Chief Development
and Operations Officer

James L. Herman

Senior Vice President, National Accounts and
Chief Compliance Officer

Michael P. Bonner

Senior Director, Finance & Accounting and
Chief Financial Officer

Tan Cheow Choon

Senior Director, International Business

Cindy B. Patton

Senior Director, Field Sales & Marketing

Todd M. Anthony

Senior Director, Organizational Development

Barry L. Lee

Director, Hospital Products

Todd W. Rice, M.D.

Director, Medical Affairs



Corporate Information

Stock Listing

NASDAQ Global Select
Market Ticker Symbol: CPIX

Annual Meeting

9:30 a.m. Central Time
Tuesday, April 24, 2018
Cumberland Headquarters
2525 West End, Suite 950
Nashville, Tennessee 37203

Independent Registered Public Accounting Firm

BDO USA, LLP
Bank of America Plaza
414 Union St #1800
Nashville, Tennessee 37219
(615) 248-2125

Transfer Agent and Registrar

Continental Stock Transfer & Trust
Company
1 State Street, 30th Floor
New York, New York 10004
(800) 509-5586
(212) 509-4000
cstmail@continentalstock.com

Forward Looking Statement

This annual report includes forward-looking statements regarding expected future results of the company. A variety of factors could cause actual results to differ materially from expected results. Please see the risk factors more fully described in our Annual Report on Form 10-K for the year ended December 31, 2017, which is filed with the U.S. Securities and Exchange Commission.

Company Headquarters

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