CUMBERLAND® PHARMACEUTICALS

Investor Presentation

Safe Harbor Statement

This presentation contains forward-looking statements concerning our approved products and product development, our technology, our competitors, our intellectual property, our financial condition and our plans for research and development programs that involve risks, uncertainties and assumptions. These statements are based on the current estimates and assumptions of the management of Cumberland Pharmaceuticals as of the date of this presentation and are subject to uncertainty and changes in circumstances. Given these uncertainties, you should not place undue reliance upon these forward-looking statements. Such forward-looking statements are subject to risks, uncertainties, assumptions and other factors that may cause the actual results of Cumberland Pharmaceuticals to be materially different from those reflected in such forward-looking statements.

Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, among others, those set forth under the headings "Risk factors" and "Management's discussion and analysis of financial condition and results of operations" in our Form 10-K and Form 10-Q Reports on file with the SEC. The Company does not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. All statements contained in this presentation are made only as of the date of this presentation. For more information on our brands, including full prescribing and safety information, please see the links to the product websites which can be found at www.cumberlandpharma.com.

Company Overview

- **Specialty pharmaceutical company**
  - Portfolio of **seven** FDA approved products
  - Promoted by **two** national sales forces
- Several **near-term catalysts** for new growth opportunities
  - **Next Generation Caldolor** product
  - **RediTrex** methotrexate product line
- **Four Phase II products** in development with upcoming study milestones
- Proven record of **successful** product development and product acquisition
- **Strong financial position** and positive net cash flows from operations

Marketed Brands

HOSPITAL

Acetadote®
(Acetaminophen Toxicity)

Caldolor®
(Pain and Fever)

Vaprisol®
(Hyponatremia)

GASTROENTEROLOGY

Kristalose®
(Acute/Chronic Constipation)

Omeclamox®-Pak
(H. pylori)

ONCOLOGY

Ethyol®
(Amifostine)

Totect®
(Dexrazoxane)

IV ACETADOTE®

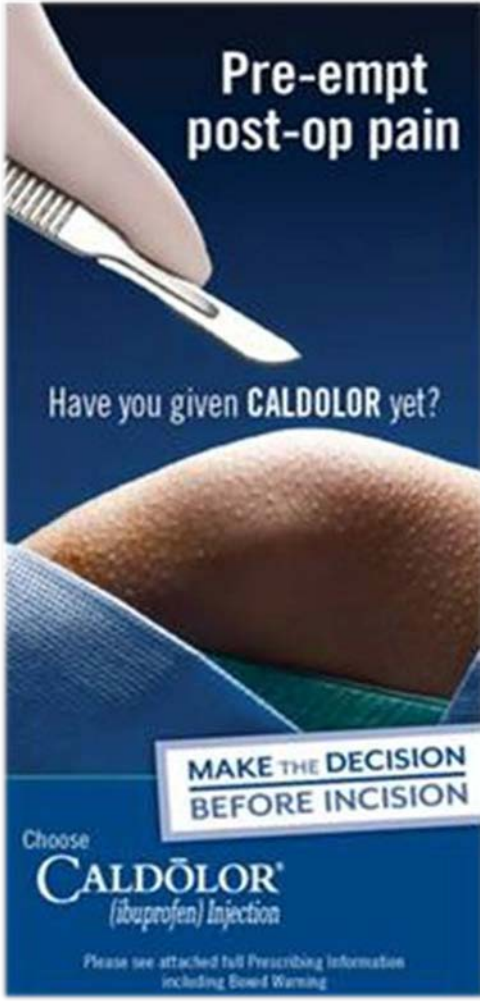
- IV treatment for **acetaminophen overdose**
- Developed and registered by **Cumberland**
- Acetaminophen is the **leading cause of poisoning in the U.S.***
- Acetadote now **standard of care**
- Cumberland offers both Brand and Authorized Generic
- Favorable court rulings upholding patents
- Maintaining **significant market share**

National Poison Data System, American Association of Poison Centers

CALDOLOR®

- Patented, **injectable formulation of ibuprofen**
- Developed and registered by **Cumberland**
- **First injectable** approved in the US for pain & fever
- Unresolved pain remains **leading cause for hospital readmissions,** with a total **market potential of over 700M units***
- Significant data supports pre-op management of inflammation
- **Pediatric labeling** approved by FDA and launched
- Submitted **Next Generation** product for approval

**Symphony Source Health*



KRISTALOSE®

(lactulose) For Oral Solution

- **Unique** crystalline formulation of lactulose
- Prescription strength laxative
- **Clinically proven** increases in patient satisfaction
- Acquired from Mylan Laboratories
- Repositioned to reflect **branded status**
- New pricing allowed co-pay support
- Expanding **Managed Care coverage**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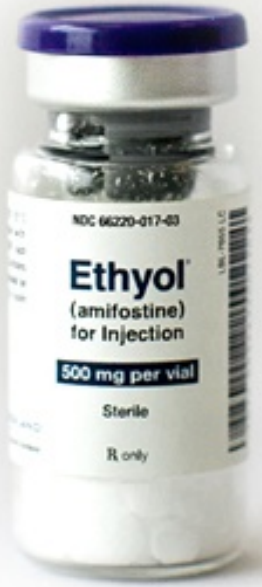
ONCOLOGY

Ethyol® (amifostine) for Injection

- Re-launch of an FDA-approved **oncology hospital brand**
- **Protects against** the harmful effects of cancer treatments
- **Protects the patient's healthy tissue, not the tumor**
- Indicated for use with **head & neck and ovarian cancers**
- Potential to become Cumberland's **largest selling brand**



Commercial Portfolio Expansion Strategy

IDENTIFY
Late Stage Candidates

ACQUIRE
Under-Promoted, Approved Brands

EXPAND
Existing Products

DEVELOP
Early-Stage Candidates

PRODUCT PORTFOLIO

RediTrex™

- **New delivery of methotrexate** designed for the treatment of various forms of **arthritis**
- **Exclusive U.S. rights** through a long-term partnership with the **Nordic Group** (based in Europe)
- **Widely used** throughout Europe with a **strong brand presence**
- The U.S. methotrexate market is seeing **significant growth**
- **Preparing FDA submission** for approval in the U.S.

Ifetroban Overview

- A **potent, selective** antagonist of thromboxane receptor (TPr)
- **Initially developed by Bristol-Myers Squibb** as an anti-platelet agent
- **Safety is well-established** in 26 clinical studies with **over 1,300 subjects**
- Cumberland is collaborating with Vanderbilt, Harvard, Scripps and other academic centers
- Cumberland successfully manufactures b**oth IV and oral formulations**

Rationale for Ifetroban

Ifetroban Inhibits The Thromboxane Receptor (TPr):

- Antagonist of smooth muscle contraction, platelet aggregation, and inflammation
- New data also demonstrates impact on fibrosis

→ **Hepatorenal Syndrome:** Renal Vasoconstriction, Liver Inflammation, & Fibrosis

→ **Aspirin Exacerbated Respiratory Disease (AERD):** Airway Constriction, Vasoconstriction, & Cellular Infiltration/Inflammation

→ **Systemic Sclerosis:** Vasoconstriction, Autoimmune Inflammatory Process, & Fibrosis

→ **Portal Hypertension:** Endothelial Dysfunction, Liver Fibrosis, & Inflammation

Ifetroban Development Pipeline

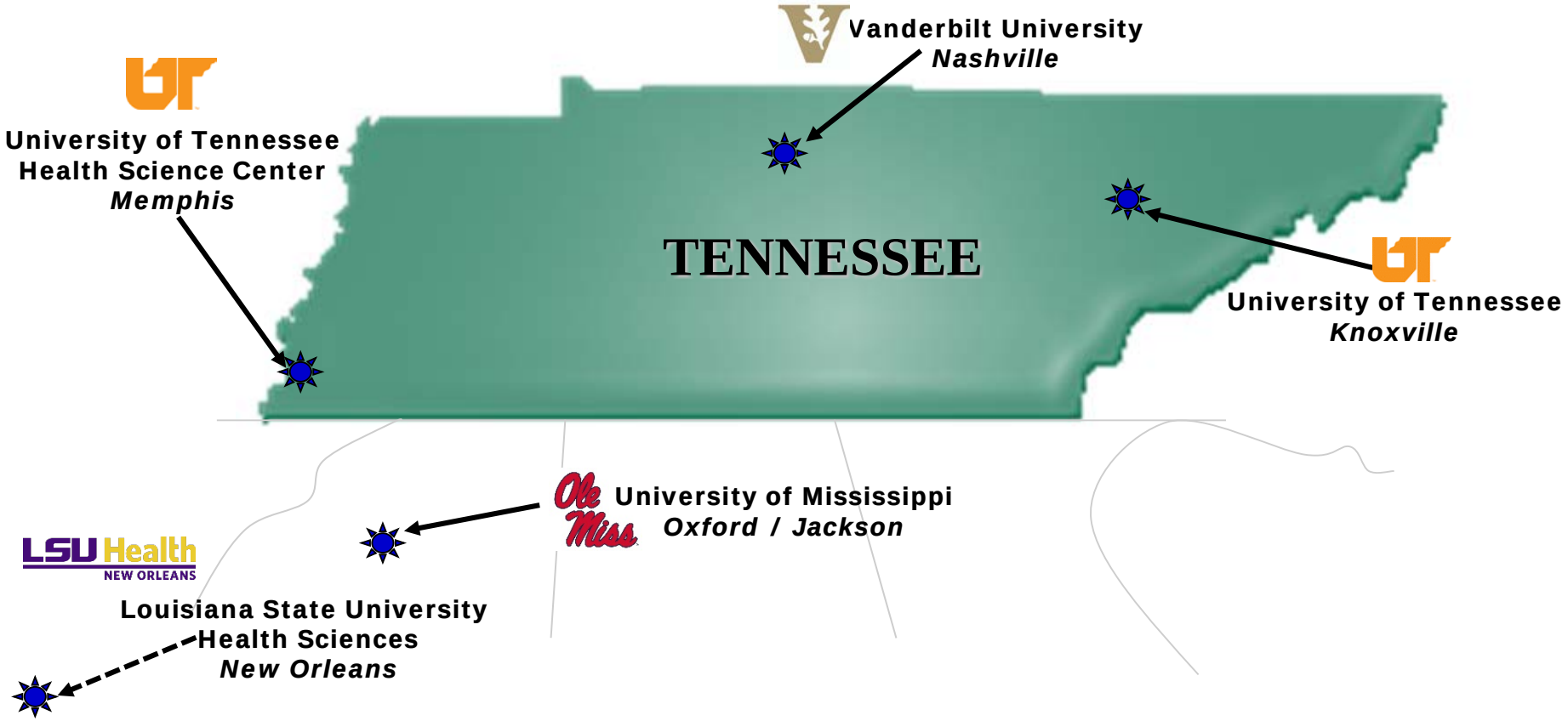
Existing Safety Profile of >1,300 Patients

- Hepatoren® *(hepatorenal syndrome)*
- Boxaban® *(aspirin-exacerbated respiratory disease)*
- Vasculan® *(systemic sclerosis)*
- Portaban® *(portal hypertension)*

Phase II Study Data is Next Milestone

- Anti-inflammatory
- Anti-fibrosis

Collaboration Partners



Building Our Product Portfolio

Deploying a Multifaceted Strategy to Drive Value Creation

Acquisition Initiative

GOAL TO ADD ONE NEW PRODUCT PER YEAR

through business development initiative or internal product development

Active, ongoing initiative to identify, evaluate and acquire/license **new products** into the portfolio

Source opportunities through direct efforts and intermediaries

Seek commercial and late stage development assets that fit our **strategy and focus**

- Branded, Rx products in hospital acute care or gastroenterology
- Sales of **$5-25 million or larger** with attractive margins

Financial Overview

($ in millions)	**Q2 2018**
Net Revenues	$10.2
Cost of Products Sold	1.5
Gross Profit	**$8.7**
Selling & Marketing	$5.1
Research & Development	1.5
General Administrative	2.3
Amortization	0.6
Operating Income (Loss)	($0.9)
Adjusted Earnings*	**$0.2**

**Represents a non-GAAP financial measure. For a reconciliation, see the Appendix.*

Summary
Balance Sheet

($ IN MILLIONS)	*Q2 as of June 30, 2018*
CASH & SECURITIES	$50.7
TOTAL ASSETS	90.4
TOTAL LIABILITIES	30.8
RETAINED EARNINGS	8.6
TOTAL EQUITY	59.7

**Continued Share Repurchase Program*
**Tax carry forward credits of $44 million available*

Cumberland Moving Forward

- Diverse product portfolio **with 7 FDA approved brands**
- Proven **development and commercialization capabilities**
- Various initiatives in place to support **near-term growth**
- **Four Phase II** products in development with upcoming study milestones
- **Strong financial position** with positive net cash flows from operations
- **Valuation gap** given assets, cash, sales, and pipeline

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Appendix

Vaprisol®

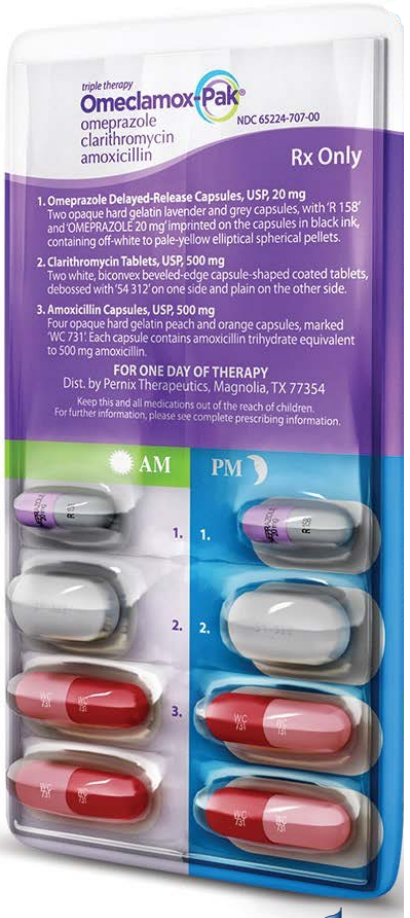
- IV treatment for **hyponatremia**
- Patented, branded hospital product
- Delivered in a pre-mixed bag
- Promotes free water secretion in hospitalized patients suffering from an imbalance of sodium and water levels
- Condition results from a variety of critical care conditions including **ICU, neurology, nephrology, & oncology**
- Acquired from Astellas

Omeclamox®-Pak

H. pylori Treatment
for patients with duodenal ulcer disease

	Omeclamox®-Pak	PrevPac®	Pylera®
Number of Prescriptions/Co-Pays	1/1	1/1	2/2
Days of Therapy	10	10-14	10
Doses Per Day	2	2	4
Pills Per Day	8	8	14
Total Pill Burden	80	112	140

- **Newest treatment** for Helicobacter pylori (H. pylori) a frequent cause of stomach ulcers
- A triple therapy brand
  - Omeprazole (Prilosec)
  - Clarithromycin
  - Amoxicillin
- **Requires fewer pills** than other products that treat H. pylori
- **Shorter course of therapy** enhances compliance



TOTECT®
(dexrazoxane) for injection

- FDA-approved **oncology hospital brand**
- Indicated to treat toxic effects of **extravasation** (leakage) associated with anthracycline chemotherapy
- Can **limit damage** from extravasation and enable patients to continue treatment
- Anthracyclines are **widely used** in the treatment of breast cancer, soft tissue sarcomas, and lymphomas

Partnership Strategy Slide

Streamline Operational Effectiveness and Expanding Market Penetration via Partnerships

CardinalHealth™

U.S. distribution partnership with **Cardinal Health**

Piramal knowledge action care

Co-Promotional partnership to **expand our hospital coverage across the U.S.**

CLINIGEN Specialty Pharmaceuticals

Strategic alliance for **brand representation with the U.S.**

Poly

Co-Promotional partnership to **expand medical specialties covered** in support of Kristalose

International Distribution

Bringing our medicines to patients throughout the world through a growing network of distinguished international partners

North America

CardinalHealth™

Teligent

Europe

GRIFOLS

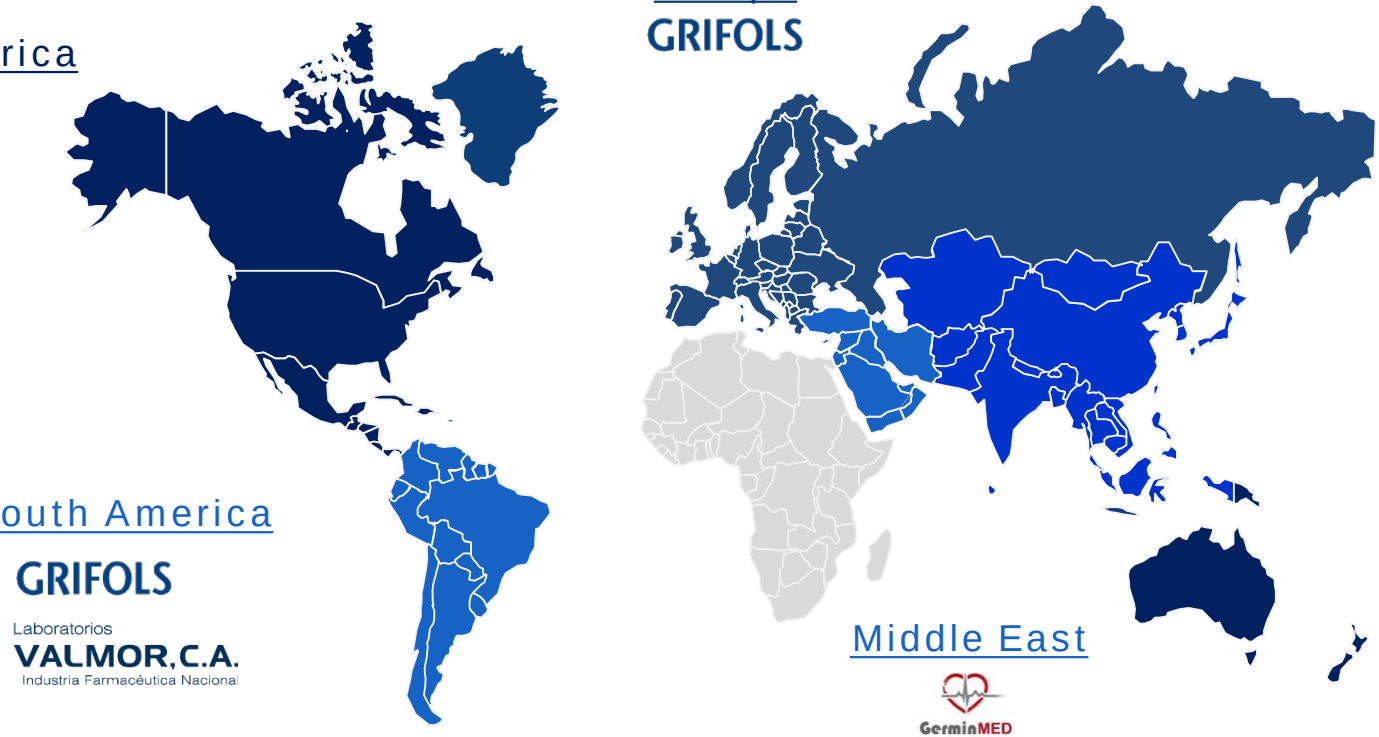
Asia

(주)한국 디비팜
DB Pharm Korea Co.,Ltd.

誉衡药业
GLORIA
PHARMACEUTICALS

SOHO

Sandor



South America

GRIFOLS

Laboratorios
VALMOR,C.A.
Industria Farmacéutica Nacional

Middle East

GerminMED

Oceania

phebra

Seqirus
A CSL Company

Hepatoren®
in HRS

- Patients with HRS have **severe multi-organ dysfunction**
- **No FDA approved treatment** for this unmet medical need
- **Orphan Drug candidate**, with an estimated patient population of 175,000

- Cumberland has **completed initial Phase IIA study**
  - Ifetroban was **well-tolerated** across all doses with **no safety concerns**
  - Showed **signals of improved kidney function**

Boxaban®
in AERD

- **Chronic condition** characterized by asthma, sinus infections, and nasal polyps
- **No FDA approved treatment** for this unmet medical need
- Potential **Orphan Drug candidate**

- Cumberland has **completed initial Phase IIA study**
  - Ifetroban was **well-tolerated** with **no safety concerns**
  - Showed **signals of efficacy** and improved respiratory function

Vasculan® in SSc

- **Chronic, life-threatening** multi-system autoimmune
- **Highest death rate** of any autoimmune disease
- **No FDA approved treatment** for this unmet medical need
- **Orphan Drug candidate**, with an estimated patient population of 165,000
- Cumberland is currently **conducting an initial Phase IIA study**

Portaban®
in PH

- The **most serious** complications of **liver cirrhosis**
- **Median survival is 6 years** from diagnosis
- **No FDA approved treatment** for this unmet medical need
- **Orphan Drug candidate**, with an estimated patient population of 100,000
- Patient enrollment completed in **Phase IIA study**

Reconciliation of Net Income to Adjusted Earnings

($ in thousands except per share data)	**Q2 2018**
Net Income (Loss) Attributed to the Common Shareholders	($720,688)
Net Loss at Subsidiary Attributable to Noncontrolling Interests	24,762
Net Income (Loss)	**($745,450)**
Income Tax Expense (Benefit)	$4,159
Depreciation and Amortization	701,737
Share-Based Compensation	326,100
Interest Income	(149,706)
Interest Expense	22,019
Adjusted Earnings	$158,859