Corporate Overview

Ladenburg Thalmann 2018 Healthcare Conference

October 1-2, 2018

Forward-Looking Statements

This presentation may include forward-looking statements made pursuant to the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Such forward-looking statements are subject to significant risks and uncertainties that are subject to change based on various factors (many of which are beyond Cerecor's control), which could cause actual results to differ from the forward-looking statements. Such statements may include, without limitation, statements with respect to Cerecor's plans, objectives, projections, expectations and intentions and other statements identified by words such as "projects," "may," "will," "could," "would," "should," "continue," "seeks," "aims," "predicts," "believes," "expects," "anticipates," "estimates," "intends," "plans," "potential," or similar expressions (including their use in the negative), or by discussions of future matters such as: our 2018 outlook; the development of product candidates or products; potential attributes and benefits of product candidates; the expansion of Cerecor's drug portfolio, Cerecor's ability to identify new indications for its current portfolio; and new product candidates that could be in-licensed, and other statements that are not historical.

These statements are based upon the current beliefs and expectations of Cerecor's management but are subject to significant risks and uncertainties, including: risks associated with acquisitions, including the need to quickly and successfully integrate acquired assets and personnel; Cerecor's cash position and the potential need for it to raise additional capital; reliance on key personnel, including Mr. Greenleaf; drug development costs and timing; and those other risks detailed in Cerecor's filings with the Securities and Exchange Commission. Actual results may differ from those set forth in the forward-looking statements. Except as required by applicable law, Cerecor expressly disclaims any obligations or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Cerecor's expectations with respect thereto or any change in events, conditions or circumstances on which any statement is based.

Non-GAAP Financial Measures

This presentation contains two financial metrics (EBITDA and Adjusted EBITDA) that are considered "non-GAAP" financial metrics under applicable Securities and Exchange Commission rules and regulations. These non-GAAP financial metrics should be considered supplemental to and not a substitute for financial information prepared in accordance with generally accepted accounting principles. The Company's definition of these non-GAAP metrics may differ from similarly titled metrics used by companies. EBITDA reflects GAAP net income adjusted to exclude (i) taxes, (ii) interest expense, (iii) interest income, (iv) amortization of intangibles, (v) depreciation, and (vi) inventory step-up adjustment recognized in earnings. Adjusted EBITDA adjusts EBITDA for specified items that can be highly variable or difficult to predict, and various non-cash items, including (i) share-based compensation expense, (ii) change in fair value of contingent consideration, warrant liability and unit purchase option liability (iii) one-time severance payments, (iv) restructuring costs, (v) acquisition and integration-related expenses, (vi) impairment of intangible assets, (vii) arbitration costs related to the Lachlan transaction, and (viii) sale of CERC 501. The Company views these non-GAAP financial metrics as a means to facilitate management's financial and operational decision-making, including evaluation of the Company's historical operating results and comparison to competitors' operating results. These non-GAAP financial metrics reflect an additional way of viewing aspects of the Company's operations that, when viewed with GAAP results, may provide a more complete understanding of factors and trends affecting the Company's business.

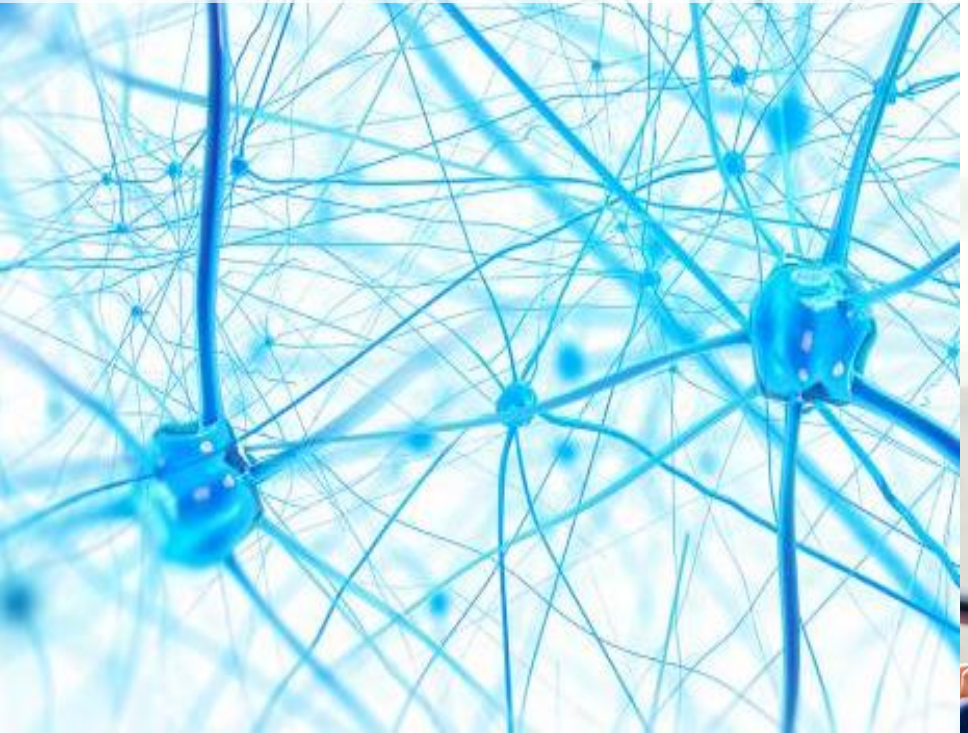
The determination of the amounts that are excluded from these non-GAAP financial metrics is a matter of management judgment and depends upon, among other factors, the nature of the underlying expense or income amounts. Because non-GAAP financial metrics exclude the effect of items that will increase or decrease the Company's reported results of operations, management strongly encourages investors to review the Company's consolidated financial statements and publicly-filed reports in their entirety.

Transforming Cerecor into a ***World-Class, Innovation Driven, Bio-Pharmaceutical Company*** Dedicated to Improving the Lives of Patients and Creating a Healthier World

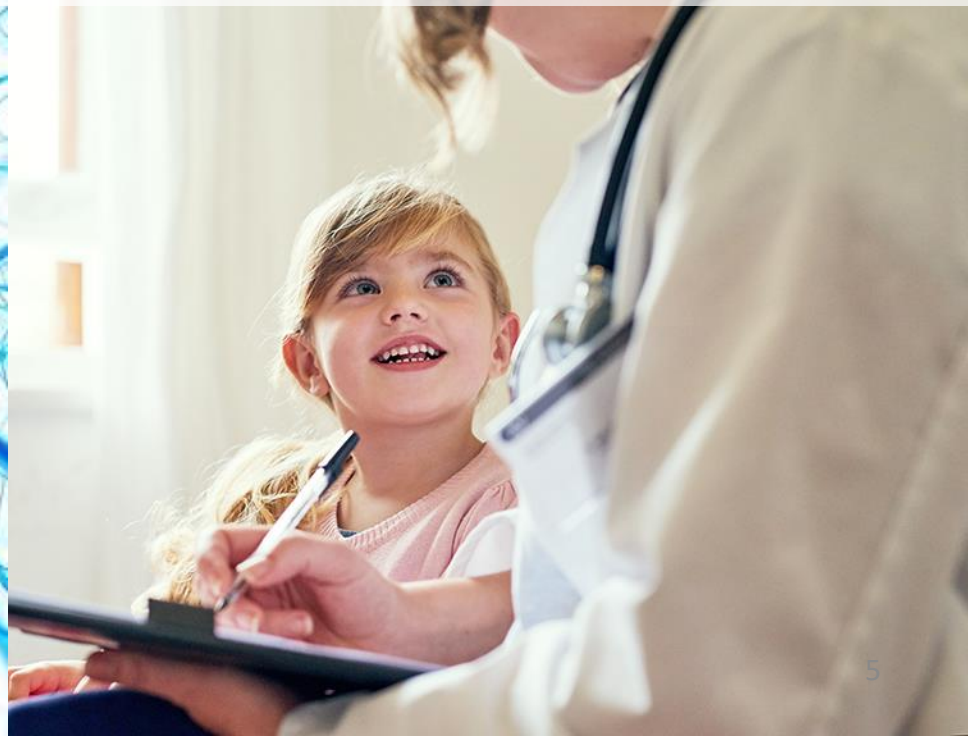
Cerecor Today

Focused on Research and Development While Building Our Commercial Capabilities

Building a Robust Biotech Pipeline of Therapies in Neurology, Pediatric and Orphan Rare Diseases



While Developing Commercial Capabilities with our Revenue Producing Pediatric Franchise



Investor Highlights

Innovative Pipeline	• Emerging clinical & early-stage pipeline • Focus on orphan, neurological & pediatric indications
Commercial Footprint	• Pediatric portfolio generating positive cash flow • Seeking to in-license additional commercial assets
Transforming CERC	• Fully-integrated commercial and R&D organization • New management team with proven track record

Overview

1. Management Team
2. Historical Milestones
3. Neurology & Pediatric Rare Disease Pipeline
4. Commercial Pediatric Portfolio
5. Strategic Growth Plans and Outlook
6. Financial Highlights

Management Team

Peter S. Greenleaf
President & CEO

20+ years industry experience
- Chairman and CEO, Sucampo Pharmaceuticals
- CEO, Histogenics Corporation
- President, MedImmune Ventures
- Manager, Centocor Biotech (Johnson & Johnson)

Matthew V. Phillips
Chief Commercial Officer

25+ years industry experience
- President and COO of Zylera Pharmaceuticals
- Executive Director, Victory Pharma
- Director, Eisai Co, Ltd.
- Account Manager, Dura Pharmaceuticals, Inc.

Joseph Miller
Chief Financial Officer

20+ years
- Vice President of Finance, Sucampo Pharmaceuticals
- Senior Director of Accounting, Qiagen
- Chief Financial Officer, Eppendorf 5Prime
- Certified Public Accountant

James A. Harrell
EVP Marketing, Investor Relations

25+ years industry experience
- Sr. Vice President | Principal The NSCI Group
- General Manager Specialty Pharmaceuticals, Covidien
- Vice President Marketing Pediatric Infectious Disease, MedImmune
- Sr. Director Marketing IMIDs, Centocor J&J Company
- Hospital Specialist, ATOD Rhone Poulenc Rorer

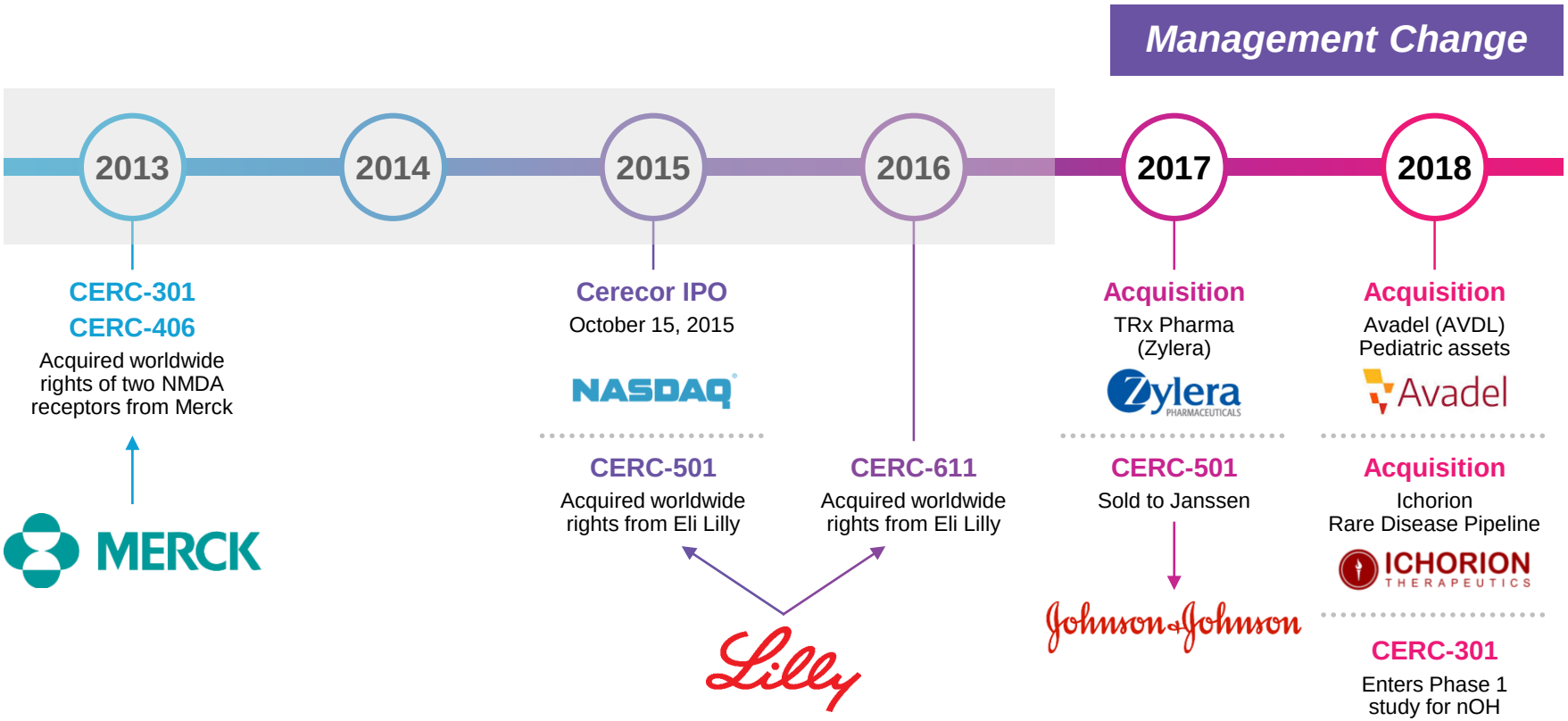
Dr. Pericles Calias
Chief Scientific Officer

20+ years industry experience
- V.P. Global CMC & Development, Sucampo Pharmaceuticals
- CSO, Pharming Group
- Sr. Director Rare CNS Diseases and Device Lead, Shire plc
- Sr. Director Drug Delivery and Chemistry, Eyetech Pharmaceuticals
- Ph.D., Tufts University, Bioorganic Chemistry

Patrick Crutcher
VP Business Development

8+years industry experience
- Chairman, President at Ichorion Therapeutics
- SVP, Business Development at Vyera Pharmaceuticals
- BD Analyst at Retrophin
- MSc, CPhil in Statistics, UCLA

Historical Milestones



Cerecor Evolution

Neurological Disorders	Pediatric Franchise	Pediatric Rare Diseases
Innovative Approaches to CNS Diseases	**FDA-Approved Products**	**505(b)(2) Assets & Platform Chemistry**
• CERC-301 • CERC-406 • CERC-611	• Poly-Vi-Flor® | Tri-Vi-Flor® • Karbinal™ ER • AcipHex® Sprinkle™ • Cefaclor • Flexichamber™ • Millipred® | Veripred® • Ulesfia®	• CERC-801 • CERC-802 • CERC-913
In-Licensed CNS Assets	**Cash Flow Generation**	**Robust R&D Pipeline**

Six Pipeline Programs

		Program	Mechanism of Action	Target Indication	Pre Clinical	Phase 1	Phase 2	Phase 3
Neurology Rare Disease Division	NCE	CERC-301	GluN2B selective, NMDA Receptor antagonist	Neurogenic Orthostatic Hypotension (nOH)				
		CERC-406	Selective, brain penetrant COMT inhibitor (2nd Gen)	Potential motoric and non-motoric symptoms of Parkinson's				
		CERC-611	TARP-γ8 dependent AMPA Receptor antagonist	Potential treatment for partial onset seizures in epilepsy				
Pediatric Division	NCE 505(b)(2)	CERC-801	Substrate replacement therapy	Inborn Error of Metabolism (IEM)				
		CERC-802	Substrate replacement therapy	Inborn Error of Metabolism (IEM)				
	NCE	CERC-913	ProTide nucleotide	Mitochondrial Depletion Syndromes (MDS)				

CERC-700(s) Four Additional 505(b)(2) Programs utilizing MicroPump and LiquiTime Dosing Technology are also within the pipeline being developed in conjunction with Avadel Pharmaceuticals in the area of Pediatrics

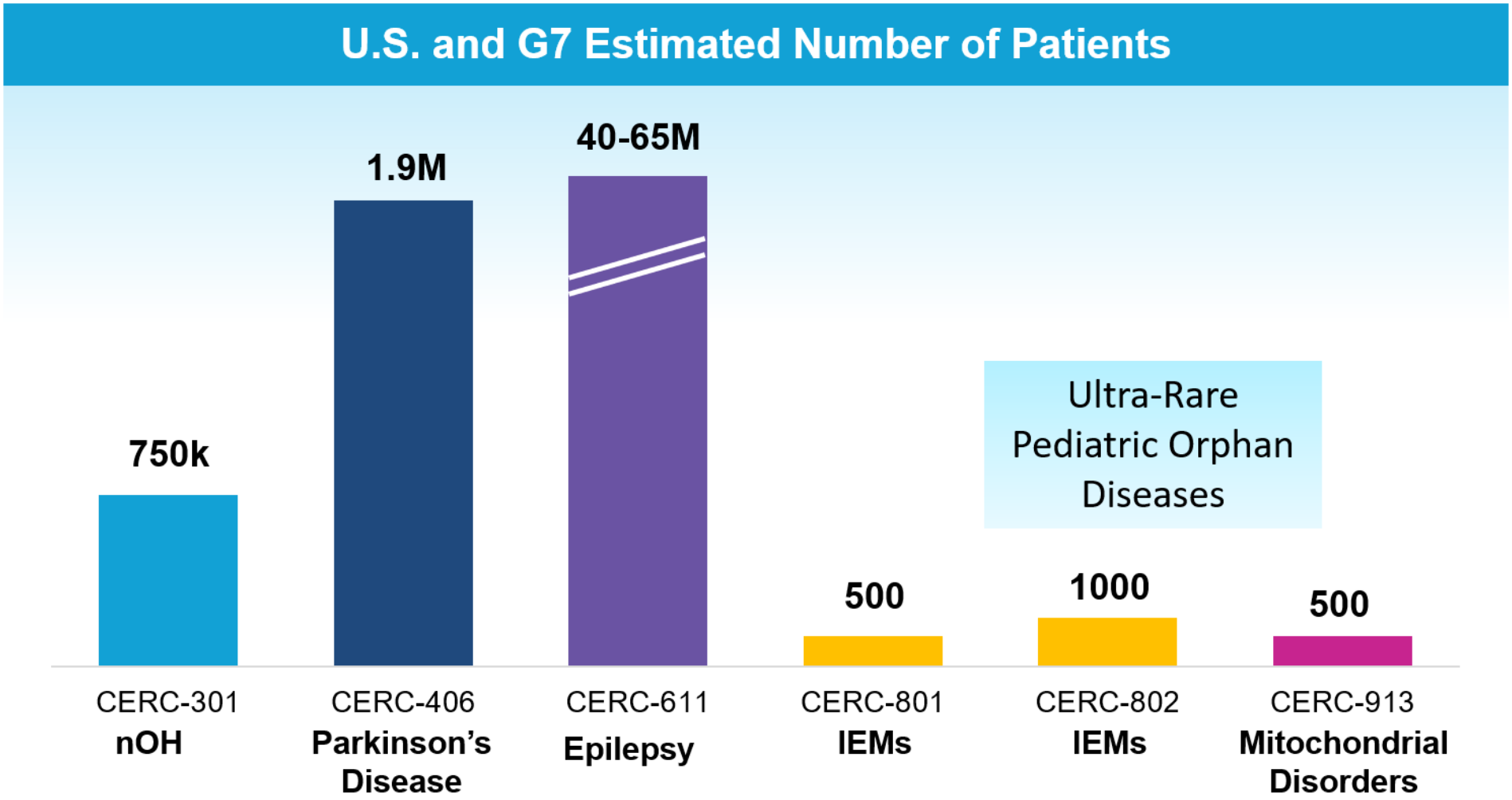
Upcoming Clinical Program Milestones

Each program supported by Clinical and/or Genetic Validation

Program	Mechanism-of-Action	Milestone
Neurological Disorders		
CERC-301 Neurogenic Orthostatic Hypotension	NR2B selective NMDA receptor antagonist	Phase I Readout 1H19
CERC-406 Adjunct for Parkinson's Disease	CNS penetrant & selective COMT inhibitor	IND Filing 1H 2020
CERC-611 Partial Onset Seizures	TARP-γ8 dependent AMPA receptor antagonist	Re-prioritization 1H19
Pediatric / Metabolic Disorders		
CERC-801* Inborn Error of Metabolism (IEM)	Substrate replacement therapy	IND Filing 2019
CERC-802* Inborn Error of Metabolism (IEM)	Substrate replacement therapy	IND Filing 2019
CERC-913 Mitochondrial Disorder	ProTide nucleotide	IND Filing 2020

*505(b)(2) Pathway

Estimated Market Potential
Patient Populations



CERC-301

NR2B selective NMDA receptor antagonist for nOH

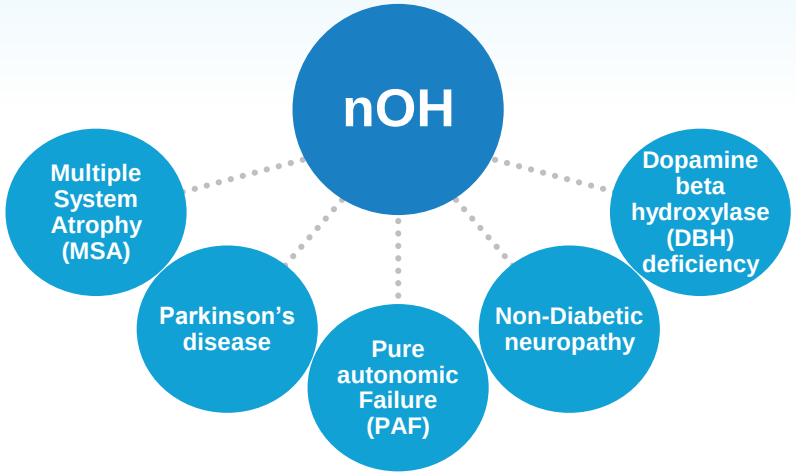
Entered into Phase 1 clinical study for Neurogenic Orthostatic Hypotension ("nOH") in Parkinson's Patients

nOH

- A rare disorder defined as low blood pressure that occurs upon standing
- Caused by autonomic vasoconstrictor failure
- Estimated 200,000 to 300,000 patients in the U.S.
- FDA-Approved Droxidopa (Northera); estimated 2018 revs ~$260mm

CERC-301 Attributes

- Oral NR2B Antagonist
- NR2B specificity reduces ketamine-like side effects
- Potential rapid onset of action
- Oral formulation

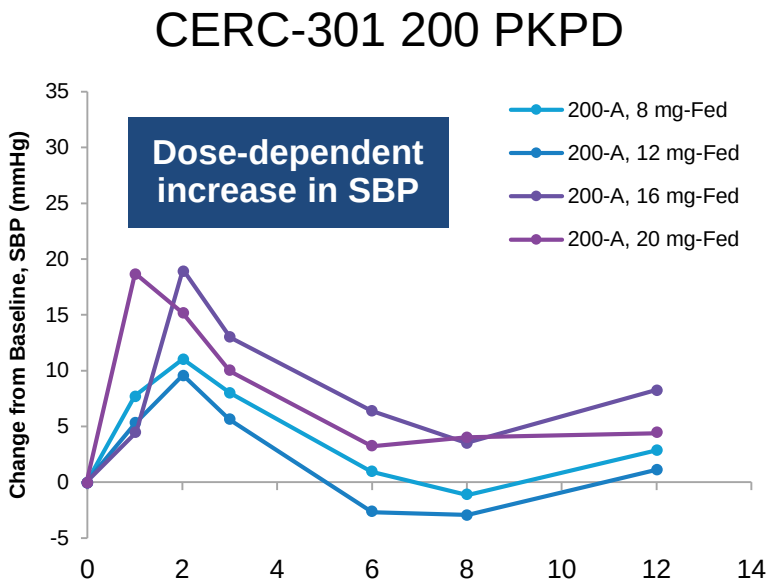


CERC-301

NR2B selective NMDA receptor antagonist for nOH

Multiple clinical exposures, providing robust safety data & BP effect

Studies[1]	N	Dose (Frequency)	Duration	BP Effect
MRK 001, 002, 003, 004 & 006 CERC 301-200, 201, 203	419	0.1 to 20 mg (fast/fed, daily to once weekly)	1 to 28 days	Yes*



Ongoing Phase 1 in PD patients with nOH

Enrollment	• 5 centers currently active in US • 7 additional sites active by October
Design	• N = 20, SAD (8, 12, 16 & 20 mg) • Double-blind, randomized, pbo-controlled • Interim Analysis at 10 patients
Endpoints	• BP effect + symptomatic assessment during a standing test • Safety, Tolerability & PK

1. Studied Populations include: Seasonal Affective Disorder (SAD), Mix Anxiety Depressive Disorder (MAD), Parkinson's Disease (PD) PKPD and Major Depressive Disorder (MDD)

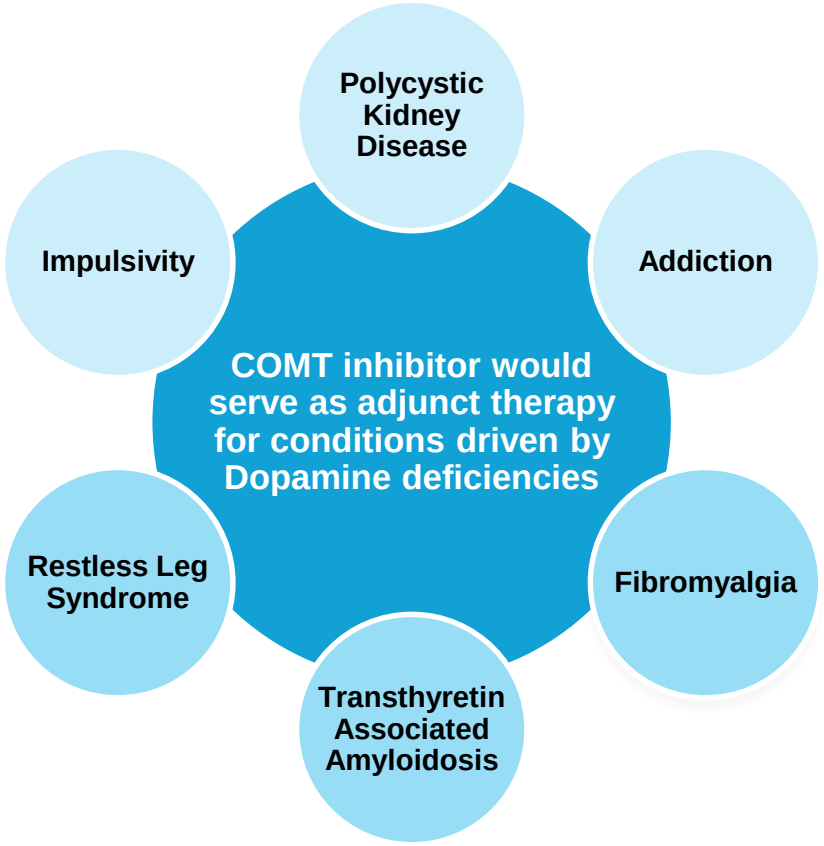
*In all patients studied a positive affect on Blood Pressure has been reported ; except one study in MMD where BP was determined to be an Adverse Event and recorded incorrectly.

CERC-406

COMT inhibitor for Parkinson's Disease

Cerecor developed a 2nd Generation CNS selective COMT inhibitor to minimize the liver toxicity associated with the current Central Inhibitor

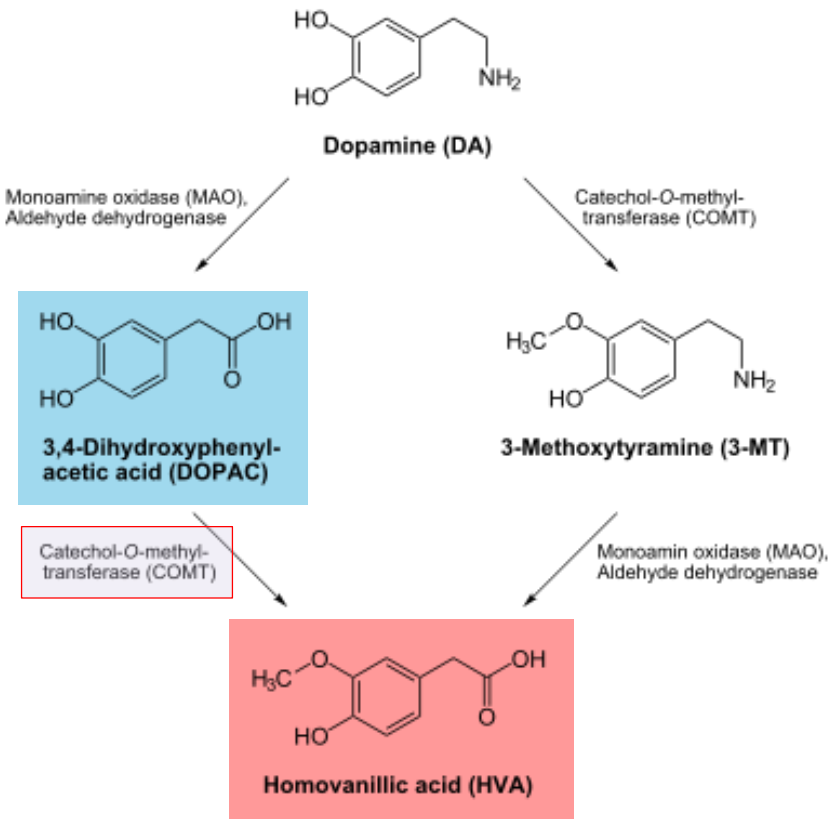
- COMT drives the catabolism of dopamine and levodopa
- Inhibition of dopamine catabolism is used to treat CNS manifestations of Parkinson's Disease
- A CNS selective COMT inhibitor presents the opportunity to minimize systemic toxicity associated with 1st generation COMT inhibitors
- Targeted therapy with clinical biomarker
  - Potential to target individuals with a genotypic predisposition for accelerated dopamine catabolism

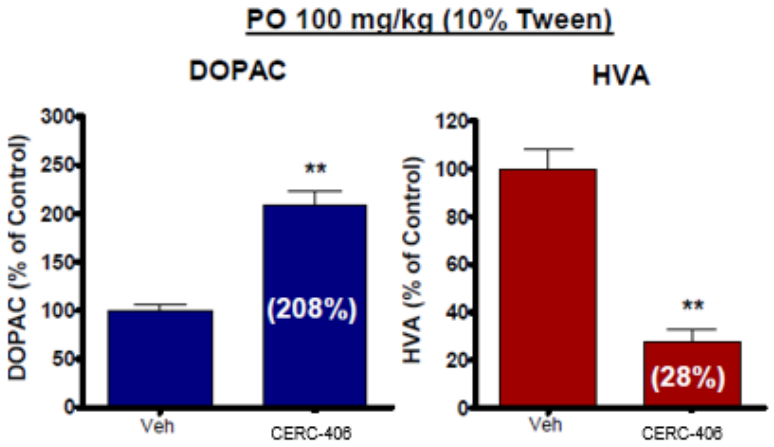


CERC-406

COMT inhibitor for Parkinson's Disease

Preclinical & clinical biomarker for translational proof-of-concept





CERC-406 Attributes

- High specificity for COMT expressed in the CNS
- Good oral bioavailability & brain penetration
- Acceptable PK profile in rat & dog
- Low potential for DDIs

CERC-611

TARP-γ8 dependent AMPA receptor antagonist for partial onset seizures

Phase 1-ready candidate with therapeutic potential for partial onset seizures in patients with epilepsy

Significant Unmet Need

- Epilepsy affects over 65 million patients worldwide
- 30%-40% of patients refractory; high degree of poly-pharmacy common
- All anti-seizure drugs have side effects (e.g. motoric) limiting use and the timely achievement of therapeutic dose levels

Unique Mechanism of Action

- CERC-611 is the first known AMPA receptor antagonist that selectively targets the hippocampus
- AMPA receptors mediate fast synaptic neurotransmission within the CNS and are a proven target for anti-seizure efficacy
- CERC-611 shows lack of motoric impairment at efficacious exposures in animal models of epilepsy

CERC-800's

Substrate replacement therapies for IEMs

PRV eligible programs capable of indication expansion

CERC-801

Multi-system disease manifestation

CERC-801 leads to significant improvement in key clinical symptoms

CERC-802

Life-threatening gastrointestinal disorder

CERC-802 rapidly resolves hematological & intestinal abnormalities

Ultra-orphan IEMs with serious and life-threatening medical needs

- 500 to 1,000 patients WW per indication
- Significant pediatric morbidity & mortality
- No approved treatments
- Documented efficacy & safety
- Clinical symptoms improve rapidly
- Reduced nonclinical requirements

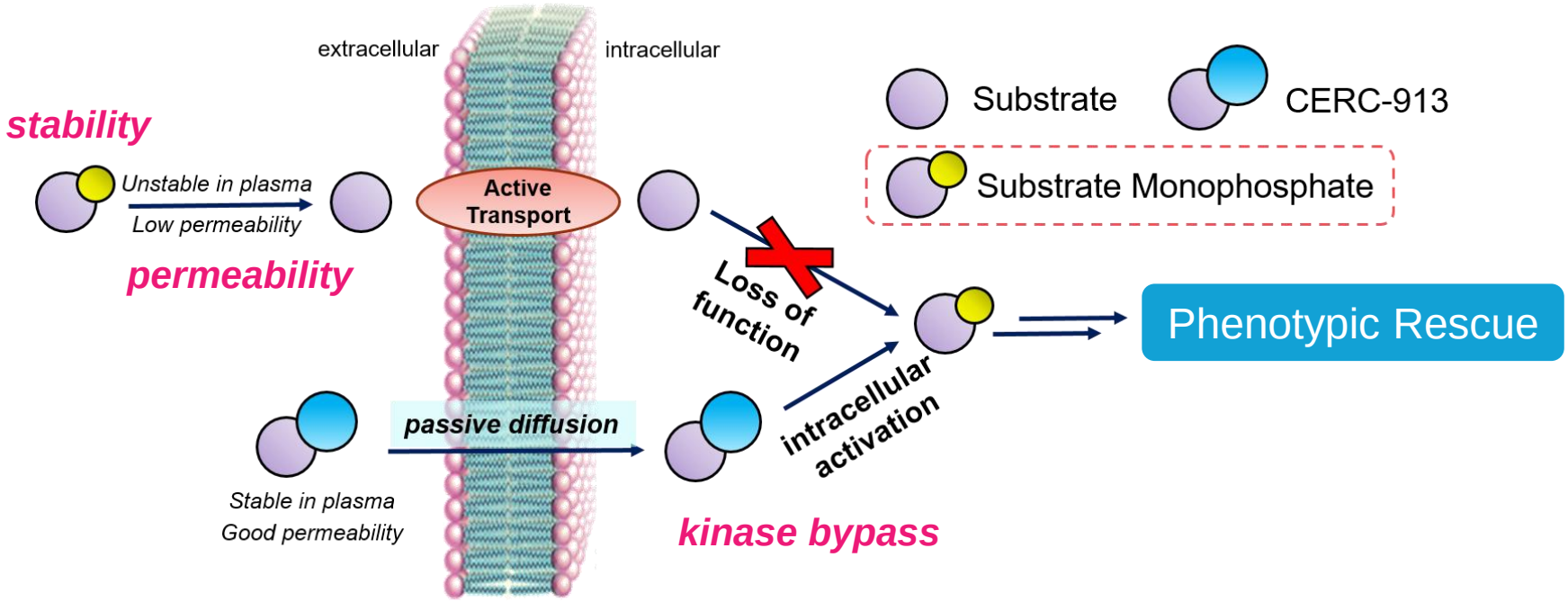
Qualification	801	802
505(b)(2) NDA Pathway	✓	✓
NCE 5-yrs Exclusivity	✓	✓
*ODD 7-yrs Exclusivity**	✓	✓
Priority Review Voucher Eligible	✓	✓
*EMA ODD 10-yrs Exclusivity**	✓	✓

*Not yet obtained

CERC-913

ProTide Nucleotide for Mitochondrial Disorder

Overcome key limitations of direct substrate replacement



CERC-913 Attributes

- *In vitro* proof-of-concept in patient-derived & animal-based disease models
- ProTide similar to advanced clinical candidates and approved drugs
- Metabolite ID & PK profile in dog support translational PKPD

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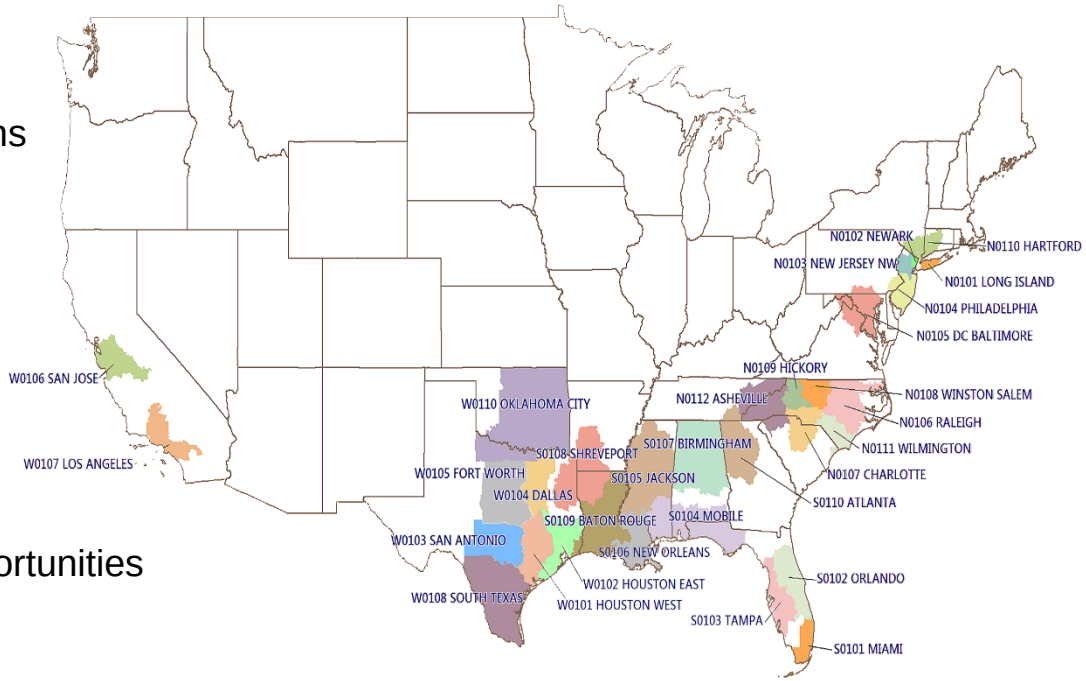
Building Commercial Capabilities in Pediatrics

~50% of the Overall Market Potential Covered with 32 Territories

- 1 Chief Commercial Officer
- 1 EVP Marketing & Investor Relations
- 3 Regional Sales Managers
- 1 Director of Sales Training and Operations
- 1 Director of Trade Sales and Operations
- 1 Sales Analyst
- 32 Territory Managers

- 3 Focused / 8 Promoted Products
- Cloud-based CRM System
- Novel SICP
- Looking towards Territory Expansion Opportunities



Pediatric Franchise with Eight Product Lines

TRX Pharmaceuticals

Poly-Vi-Flor®

Tri-Vi-Flor™

Millipred® Tablets
(prednisolone USP, 5 mg)

Millipred® DP 6 DAY
21 Tablet Dose Pack
(prednisolone USP, 5 mg)

Millipred® DP 12 DAY
48 Tablet Dose Pack
(prednisolone USP, 5 mg)

Millipred® Oral Solution
(Prednisolone Sodium Phosphate)
10 mg Prednisolone Base per 5 ml

ulesfia®
(benzyl alcohol) Lotion 5%

VERIPRED® 20
(prednisolone sodium phosphate oral solution) 20 mg Prednisolone base per 5 ml

Avadel Pediatric Assets

Karbinal™ ER
(carbinoxamine maleate) extended-release oral suspension | 4mg/5mL

CEFACLOR
For Oral Suspension, USP
125 mg/5 mL • 250 mg/5 mL • 375 mg/5 mL

AcipHex® Sprinkle™
(rabeprazole sodium)
Delayed-Release Capsules

Oflexichamber®
Anti-static Valved Collapsible Holding Chamber Rx Only

Why Pediatrics

Represents a Focused, Defined and Specific Patient Population Treated by One Specialty Segment

- 24.5% of U.S. population is ≤ 18 years of age representing a sizable patient population of 81.5M in 2017
- 85,000 General Pediatricians most in group practices resulting in ~17,000 to 20,000 targets
- 50% of market covered with 30 to 50 Field Based Sales Specialists
- Ease of access and promotionally sensitive
- Series of common diagnosis and treatment approaches

Top 25 Pediatric Codes 2013 AAP Pediatric Coding Newsletter[1]

1. Routine Child Health Examination
2. Acute Upper Respiratory Infection
3. Otitis Media
4. Acute Pharyngitis
5. Asthma
6. Follow-up Exam
7. Allergic Rhinitis
8. Sinusitis
9. Dermatitis
10. Attention-Deficit / Hyperactivity Disorder
11. Cough
12. Viral Infection
13. Streptococcal Sore Throat
14. Bronchitis
15. Conjunctivitis
16. Esophageal Reflux
17. Influenza with Respiratory Manif.
18. Gastroenteritis / Colitis
19. Fever
20. Constipation
21. Vaccination
22. Abdominal Pain
23. Viral Diseases
24. Pneumonia

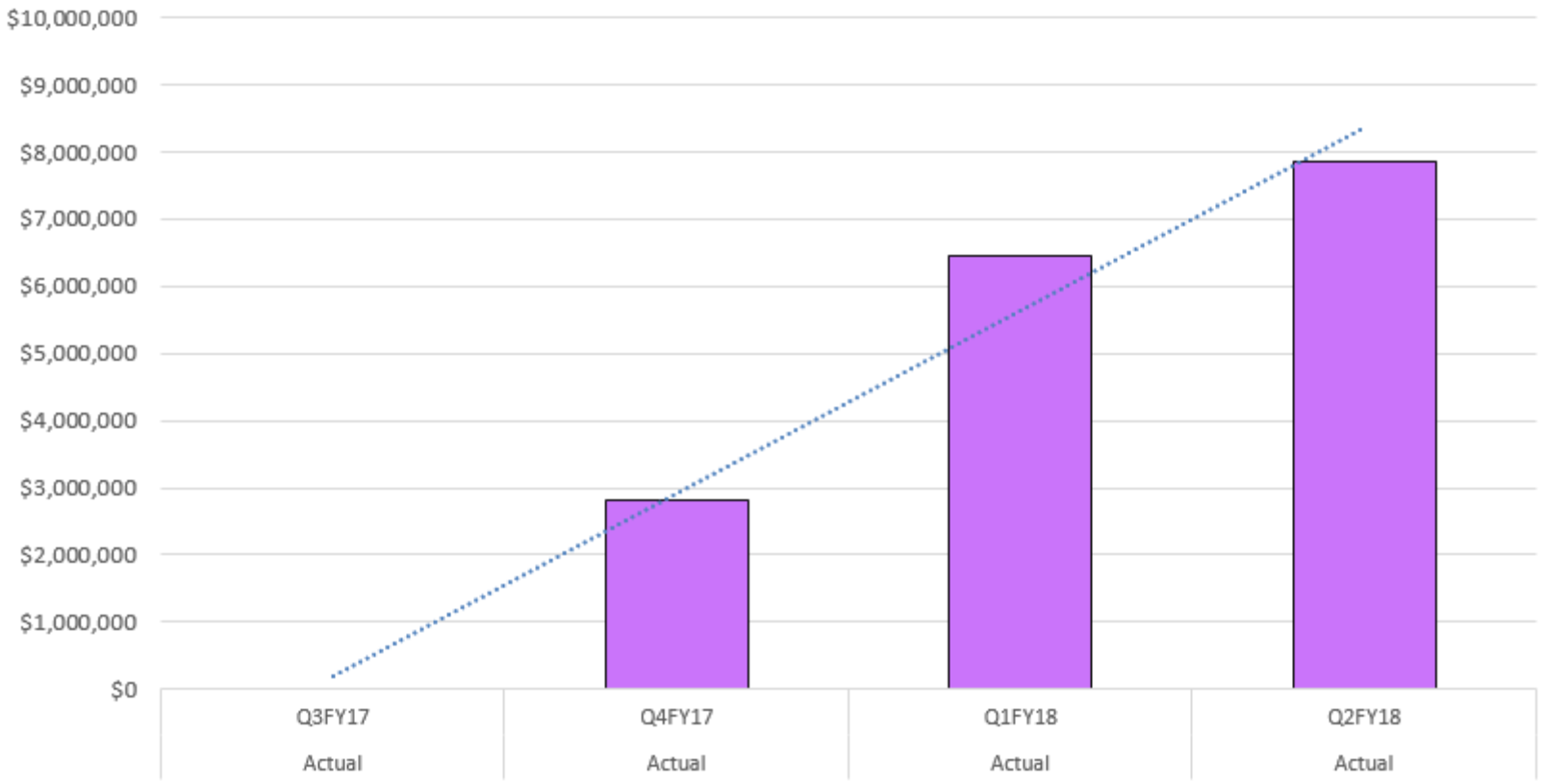
Our Existing Pediatric Product Portfolio Treats Nearly 75% of the Top 25 Pediatric Diagnosis Codes

ICD-10-CM codes are displayed as 24 code categories that include the 25 diagnoses from the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) list (2 otitis media codes were included in ICD-9-CM).

1. AAP pediatric coding newsletter coding.aap.org August 2013

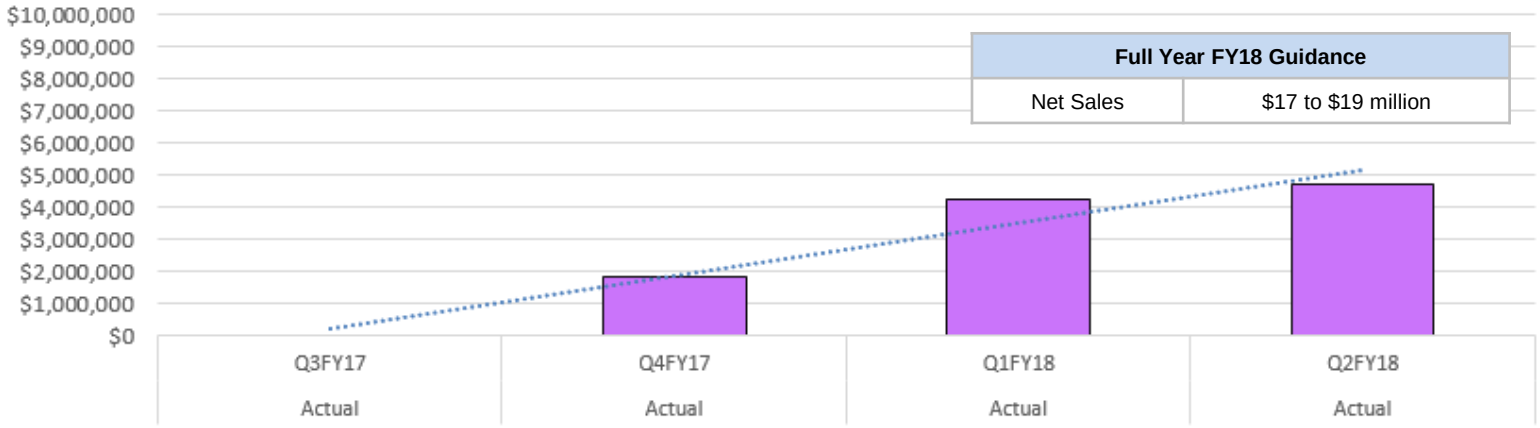
Gross Product Sales

Gross Product Sales Last 4 QTR Trend



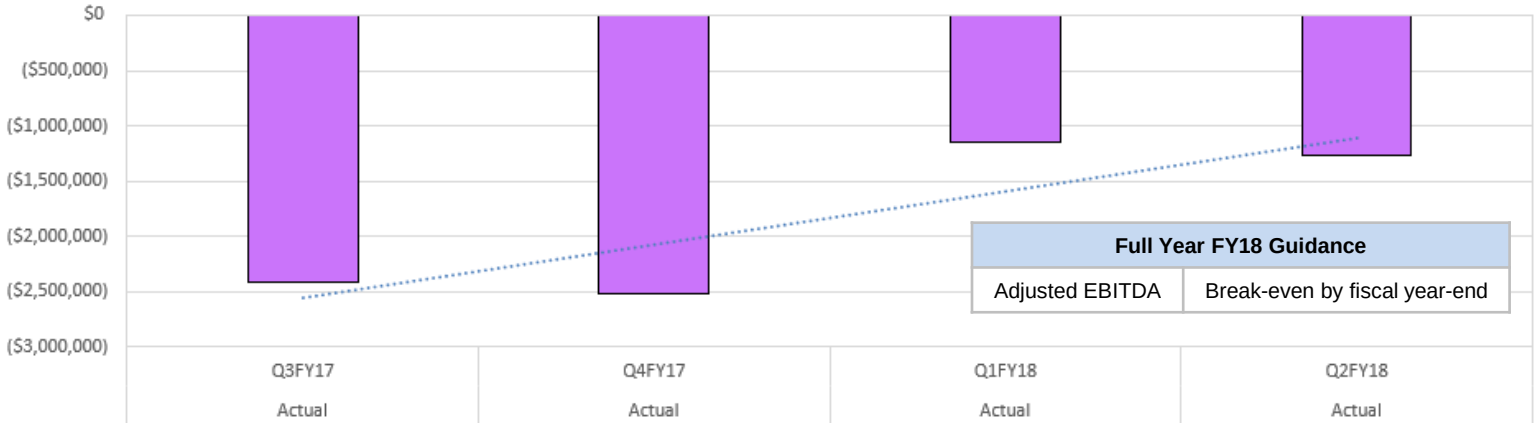
Financial Metrics: Profit/Loss

Net Sales Trend Analysis



Full Year FY18 Guidance	
Net Sales	$17 to $19 million

Adjusted EBITDA Trend Analysis[1]

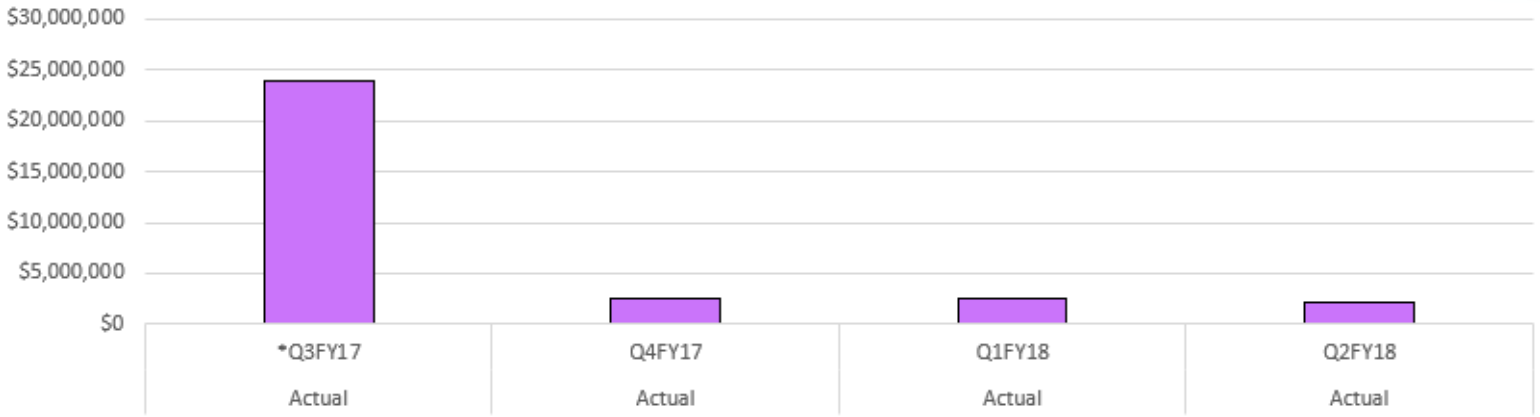


Full Year FY18 Guidance	
Adjusted EBITDA	Break-even by fiscal year-end

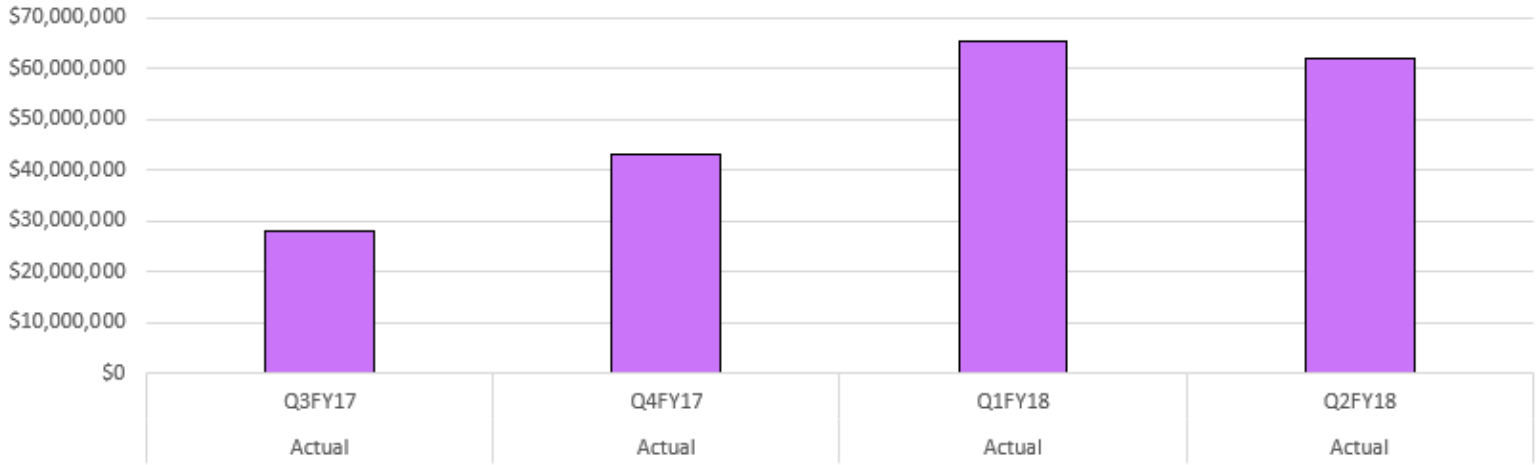
[1] See Appendix for reconciliation of GAAP Net Income to Adjusted EBITDA.

Financial Metrics: Balance Sheet

Cash Trend Analysis*



Total Assets Trend Analysis



* Includes cash receipts of $25M from Janssen Pharma for the rights of CERC-501 and the subsequent purchase of Zylera/TRx in Q4FY17

2019 Growth Plans

1 Advance Pipeline

CERC-301 1H19 Readout

CERC-406 IND 2020

CERC-611 In Process

CERC-801 IND Filing 2019

CERC-802 IND Filing 2019

CERC-913 IND Filing 2020

2 Build Commercial Excellence

Grow Market Share

Expand Commercial Footprint

3 Accelerate Business Development Activity

Acquire/in-license early and late stage commercial-ready or marketed asset(s)

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NASDAQ:CERC
www.cerecor.com

Appendix

Adjusted EBITDA Reconciliation

Reconcilation of GAAP Net Loss to Adjusted EBITDA
(in thousands)

	Three Months Ended			
	9.30.17	12.31.17	3.31.18	6.30.18
	2017	2017	2018	2018
GAAP Net Income (Loss)	$ 18,721	$ (3,092)	$ (3,883)	$ (6,007)
Adjustments:				
Income tax expense (benefit)	3,230	(1,263)	23	16
Interest (income) expense, net	(29)	(30)	100	242
Amortization of intangibles	-	404	1,017	1,233
Depreciation	5	5	6	6
Inventory step-up adjustment	-	138	45	132
EBITDA	21,927	(3,838)	(2,692)	(4,378)
Non-GAAP Adjustments:				
Stock-based compensation	264	305	243	608
Change in Fair Value of contingent consideration and warrants	(1)	28	286	9
Impairment of Intangible assets	-	-	-	1,703
Restructuring costs	400	725	213	-
Acquisition and integration related expenses	-	98	378	361
Lachlan legal arbitration costs	-	165	423	437
Sales of CERC 501	(25,000)	-	-	-
Total Non-GAAP Adjustments	(24,337)	1,321	1,543	3,118
Adjusted EBITDA	$ (2,410)	$ (2,517)	$ (1,149)	$ (1,260)