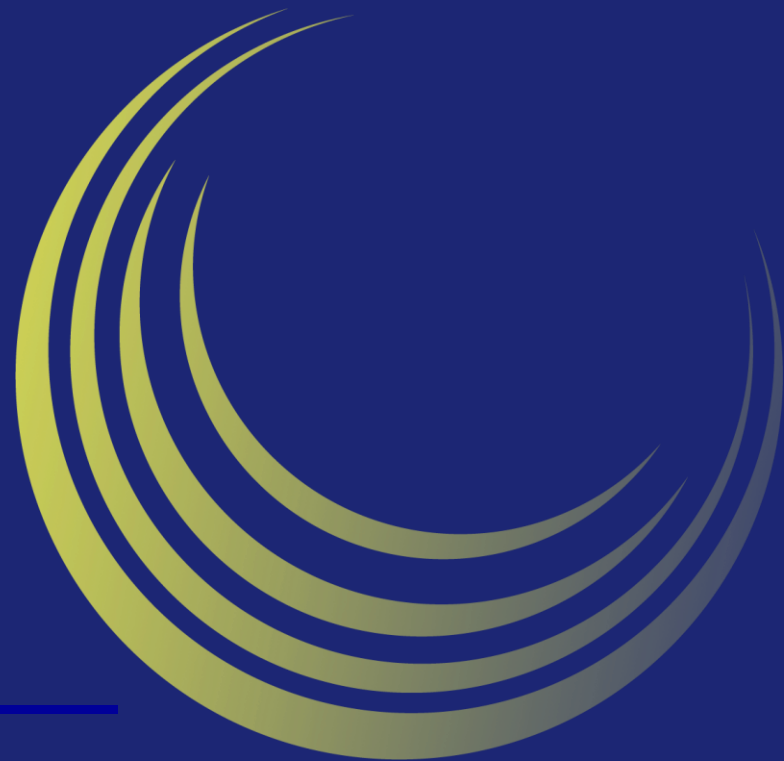


# Supernus Pharmaceuticals

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## Investor Presentation

June 2016

# Safe Harbor Statement

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This presentation and other matters discussed today or answers that may be given to questions asked include forward-looking statements within the meaning of the federal securities laws. These statements, among other things, relate to Supernus' business strategy, goals and expectations concerning its product candidates, future operations, prospects, plans and objectives of management. The words "anticipate", "believe", "could", "estimate", "expect", "intend", "may", "plan", "predict", "project", "will", and similar terms and phrases are used to identify forward-looking statements in this presentation. Supernus' operations involve risks and uncertainties, many of which are outside its control, and any one of which, or a combination of which, could materially affect its results of operations and whether the forward-looking statements ultimately prove to be correct. Supernus assumes no obligation to update any forward-looking statements except as required by applicable law.

Supernus has filed with the U.S. Securities and Exchange Commission (SEC) reports and other documents required by Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended. Before you purchase any Supernus securities, you should read such reports and other documents to obtain more complete information about the company's operations and business and the risks and uncertainties that it faces in implementing its business plan. You may get these documents for free by visiting EDGAR on the SEC website at <http://www.sec.gov>.



# Background



Pharmavene



1990

1997



Shire Laboratories

2006



2 NDA Filings



2011

2 NDA Approvals



2012

2 Product Launches



2013

Cash Flow Positive Q4



2014

\$144M in Revenues

\$17.7M Op Income



2015

Diversified & Robust Pipeline

















IPO



Cash Flow Positive Throughout 2015

# Proven Execution

## Nine Marketed Products Using Our Technologies

	1998	2001	2009	2013	2014
				 <b>Trokendi XR®</b>  <b>Oxtellar XR®</b>	
	 <b>Carbatrol®</b>	 <b>Adderall XR®</b>	 <b>Equetro®</b>	 <b>Intuniv®</b>	
			 <b>Oracea®</b>		
			 <b>Sanctura XR®</b>		
					 <b>Orenitram®</b>

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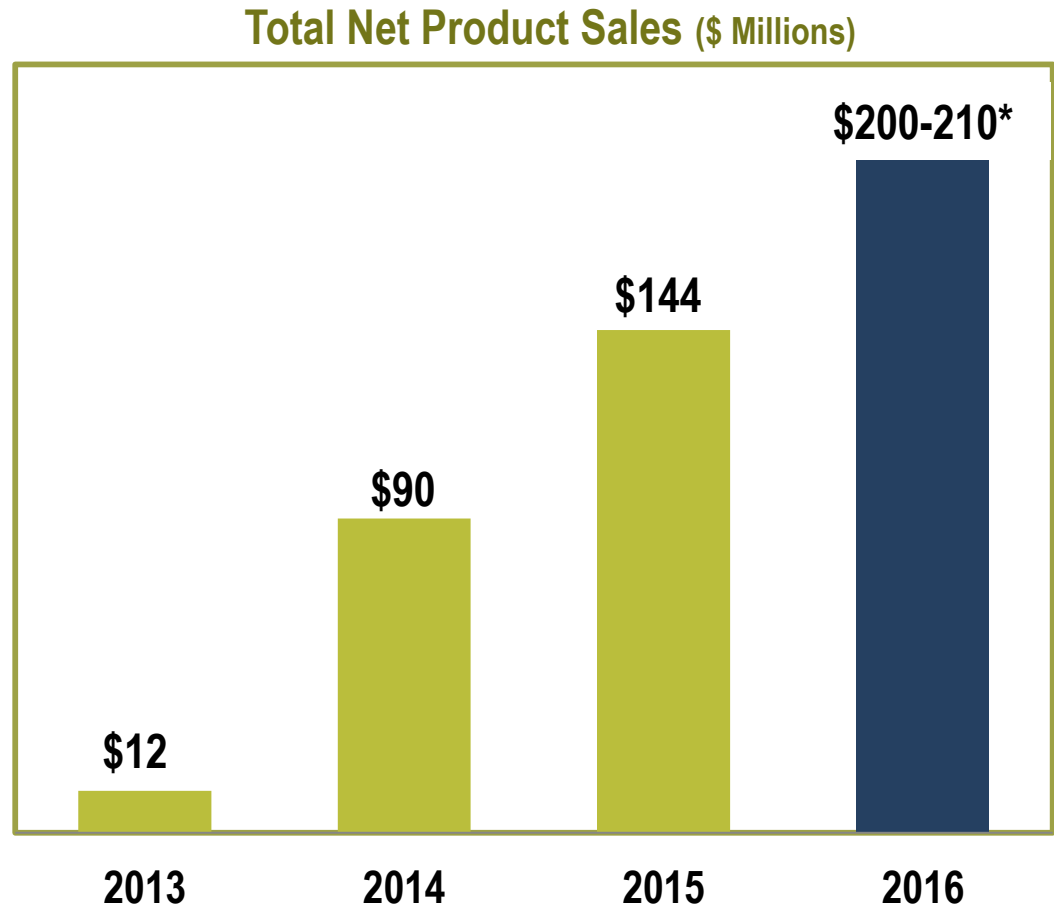


# Strong Portfolio of CNS Products

Product	Indication	Development	NDA	Launch
Oxtellar XR®	Epilepsy	February 2013		
Trokendi XR®	Epilepsy	August 2013		
Trokendi XR®	Migraine	PDUFA 3Q 16		
SPN-810	Impulsive Aggression	Phase III		
SPN-812	ADHD	Phase IIb		
SPN-809	Depression	IND/Phase II Ready		

# Strong Sales Growth

- 25-year track record
- IPO in 2012
- Robust net product sales growth since launch



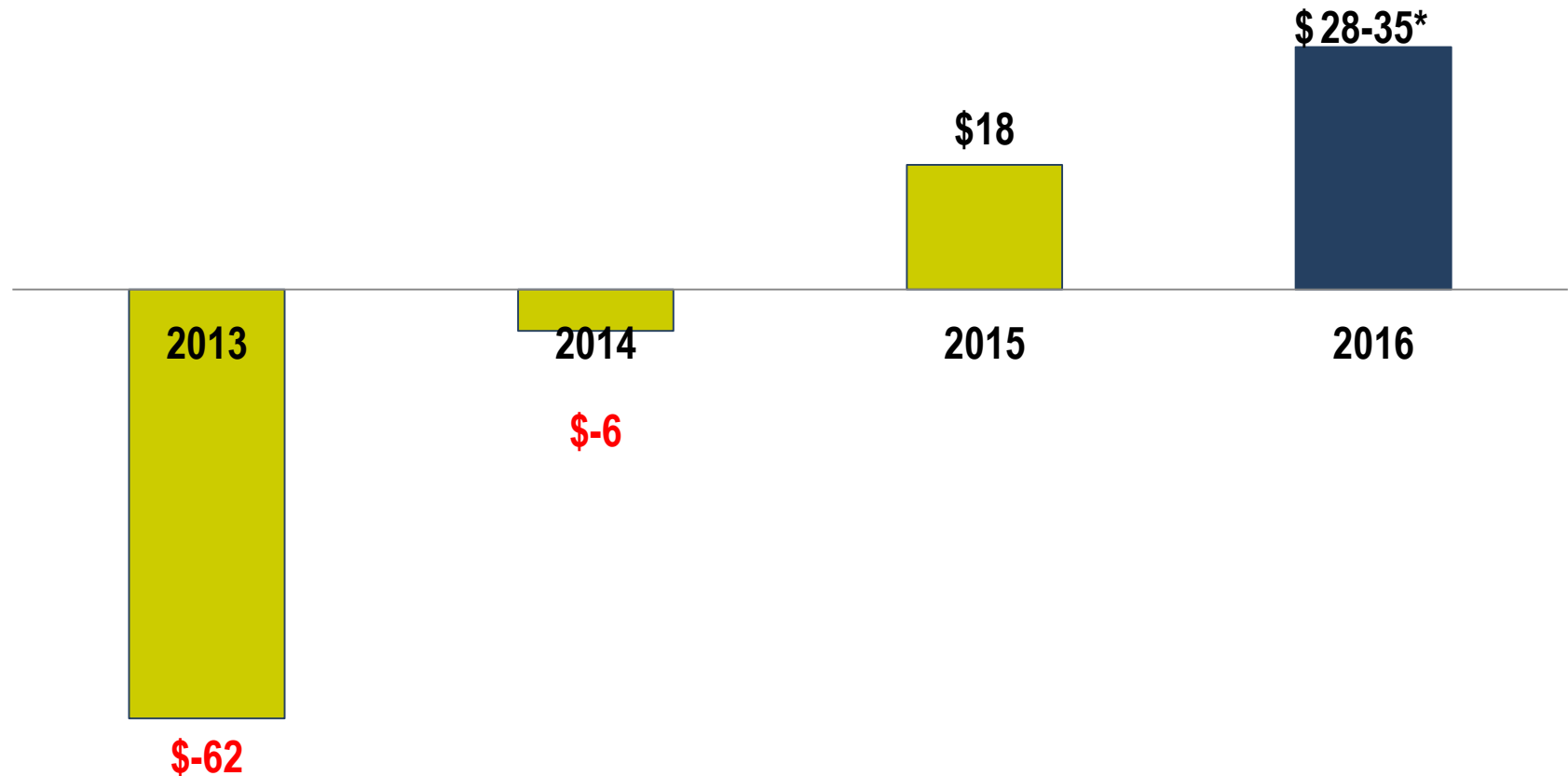
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# Profitable CNS Pharma

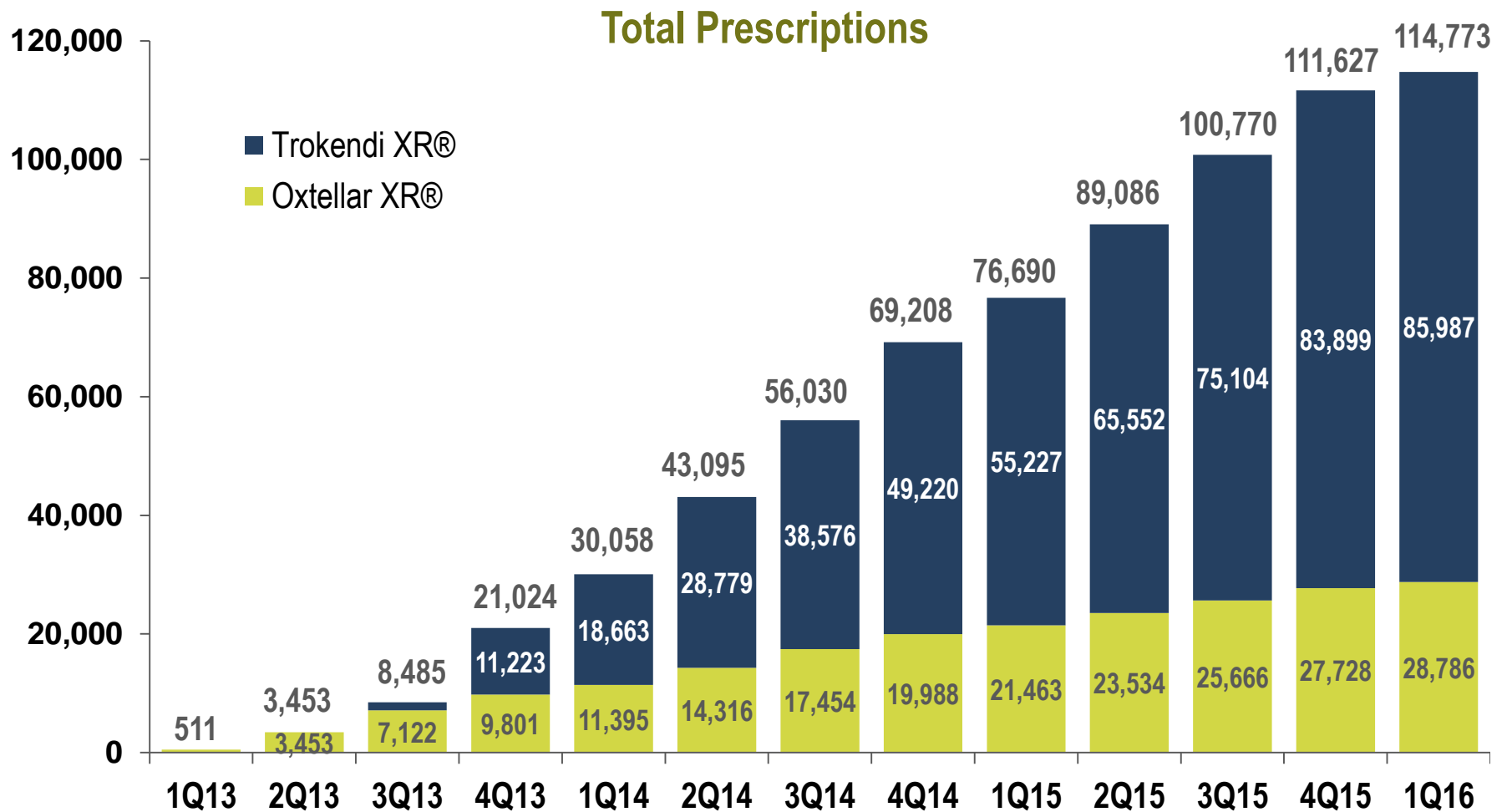
Total Operating Income (\$ Millions)



2014 excludes impact of a one-time \$30 million royalty monetization payment  
\*Guidance as provided on May 3, 2016 which has not been updated.  
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# Two Successful Product Launches



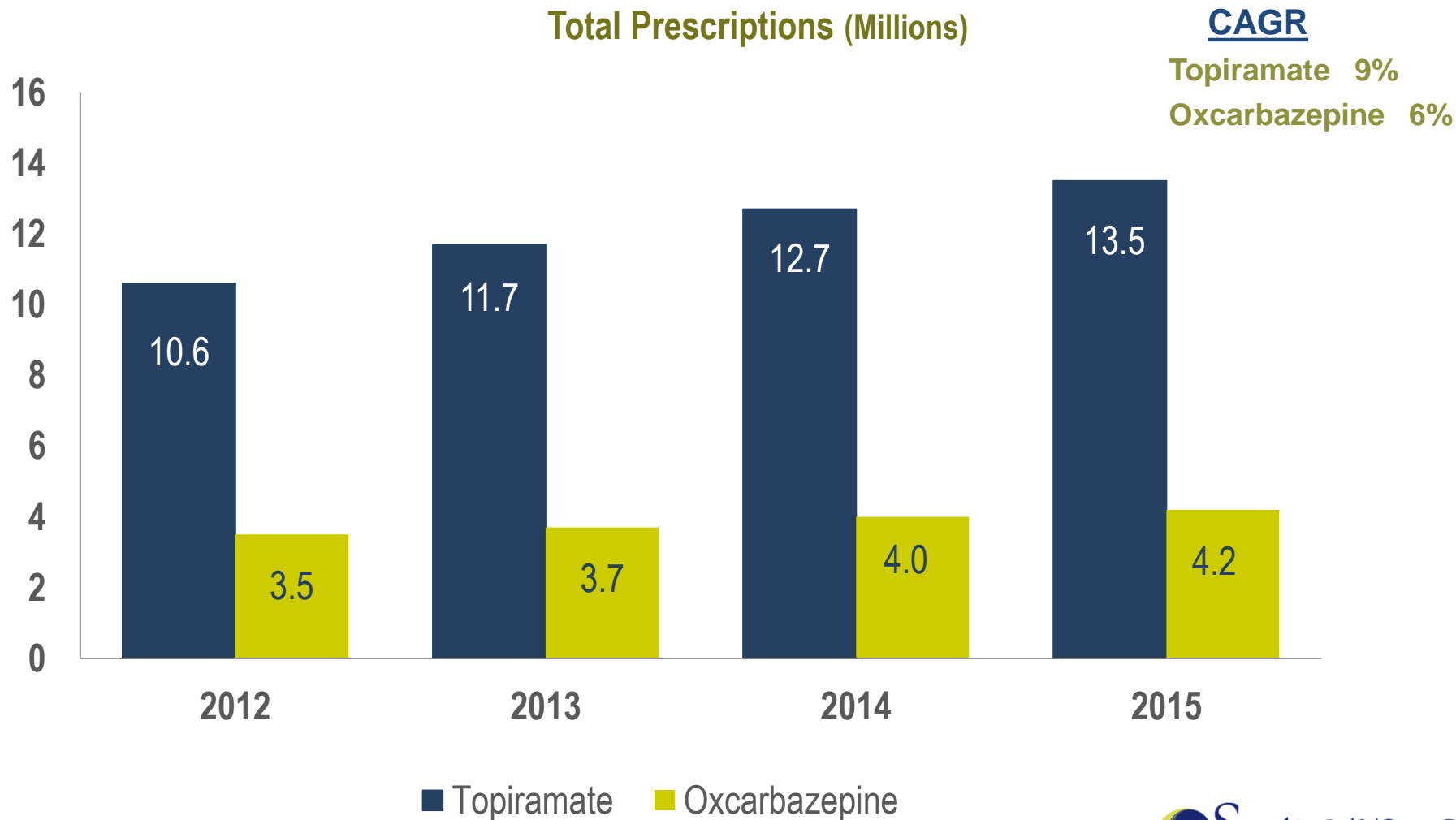
Source: IMS Monthly Prescriptions

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# Topiramate and Oxcarbazepine Markets Continue to Grow



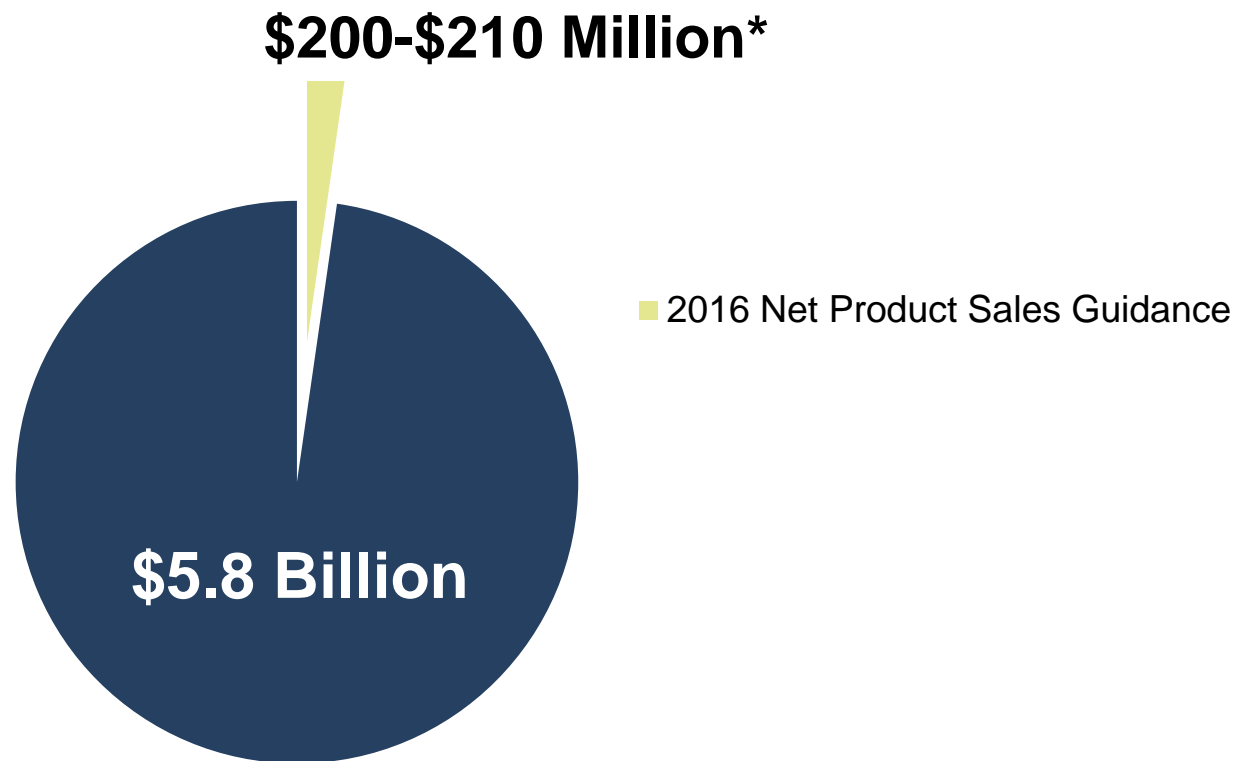
Source - IMS NPA

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# Combined Market Potential of \$5.8 Billion for Oxtellar XR® & Trokendi XR®

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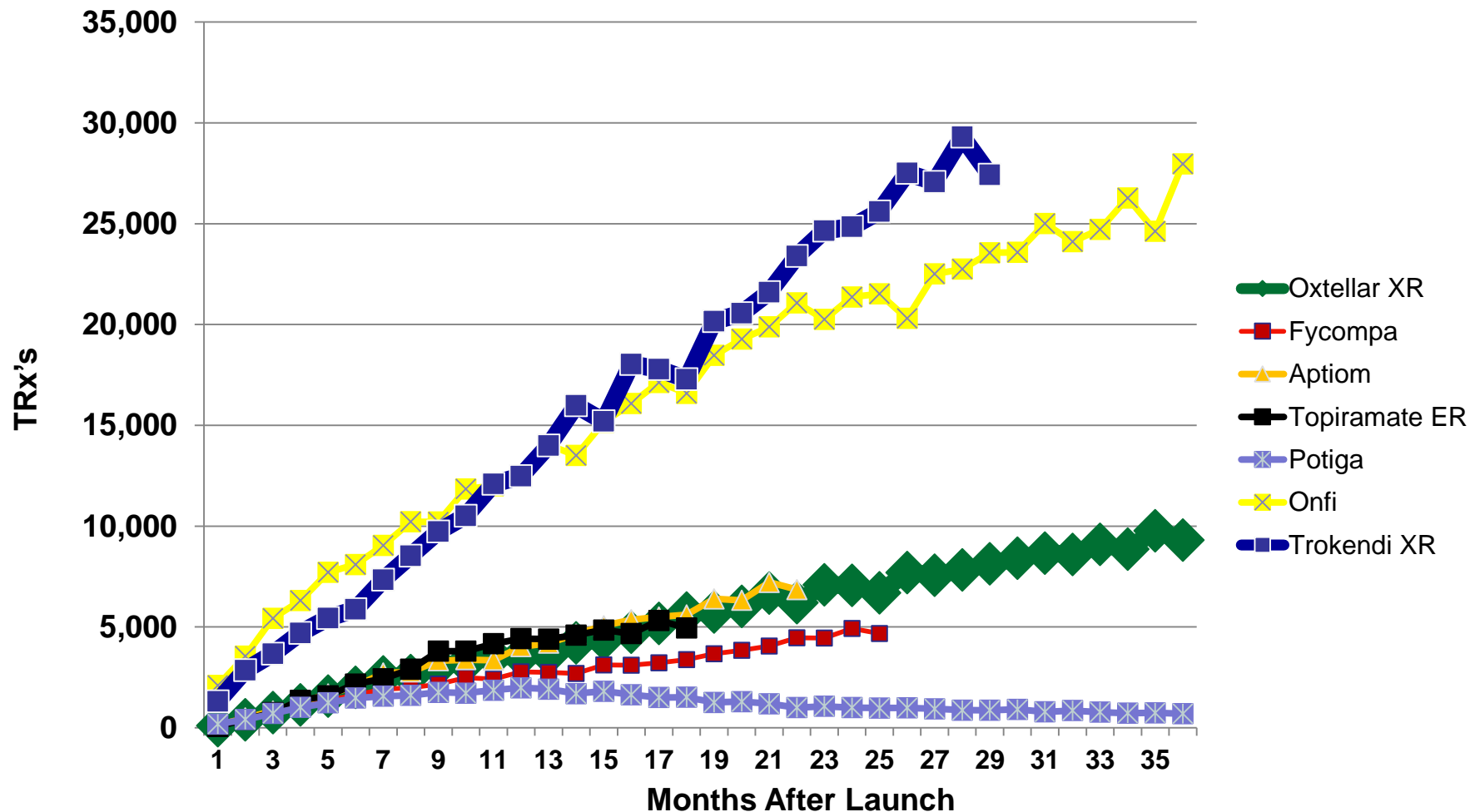
\* Guidance as provided on May 3, 2016 which has not been updated

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# Trokendi XR®

## The Most Successful AED Launch Since 2010



Launch Dates – Onfi 1/12, Potiga 5/12, Fycompa 1/14, Aptiom 4/14, Oxtellar XR 2/13, Trokendi XR 9/13, Topiramate XR 7/14

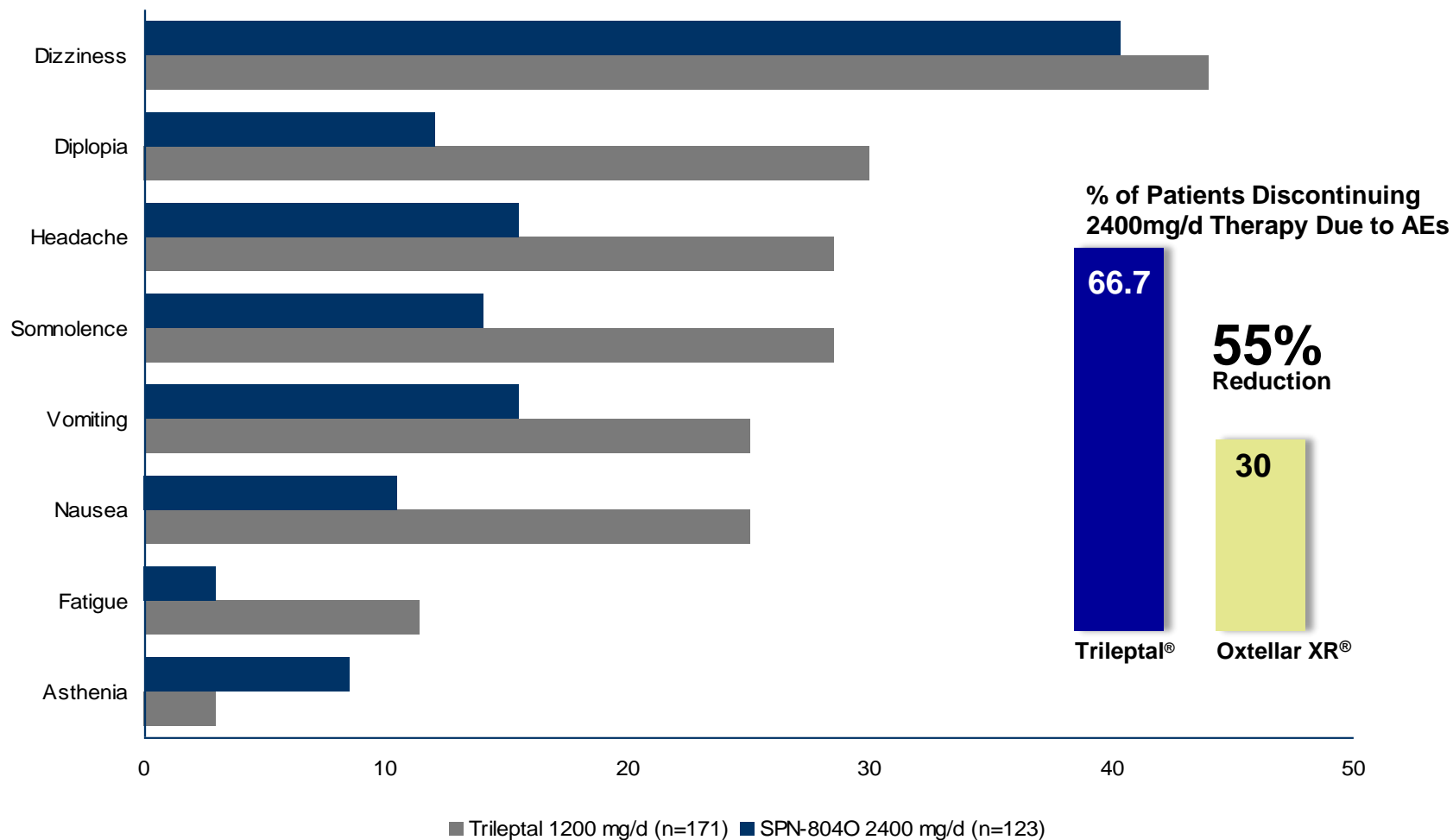
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Source – IMS NPA



# Oxtellar XR®

## Improved AE Profile at Double the Dose of Trileptal®



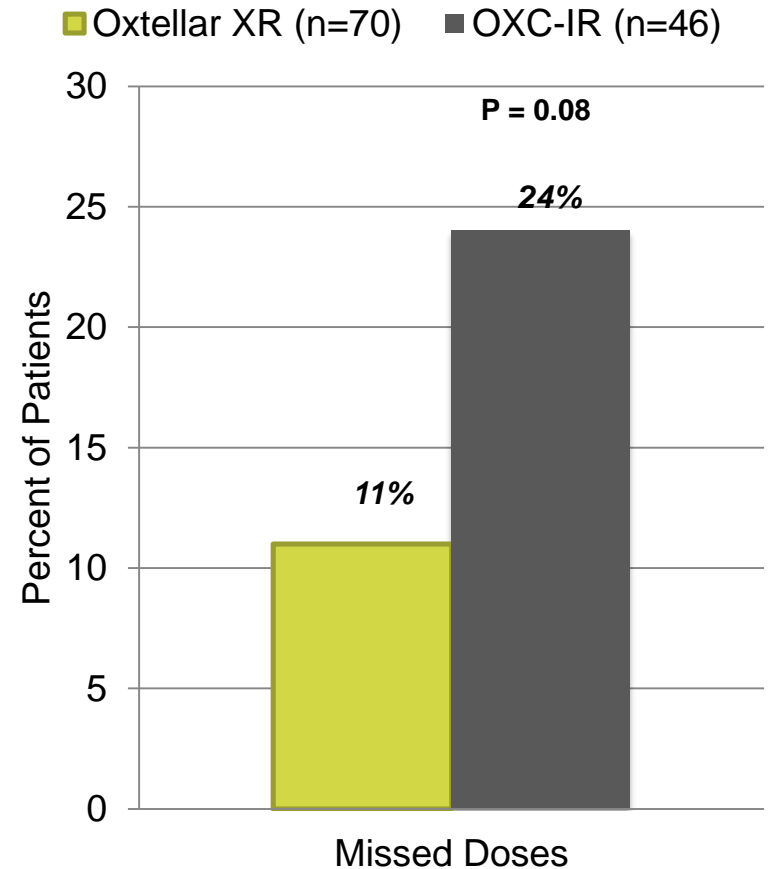
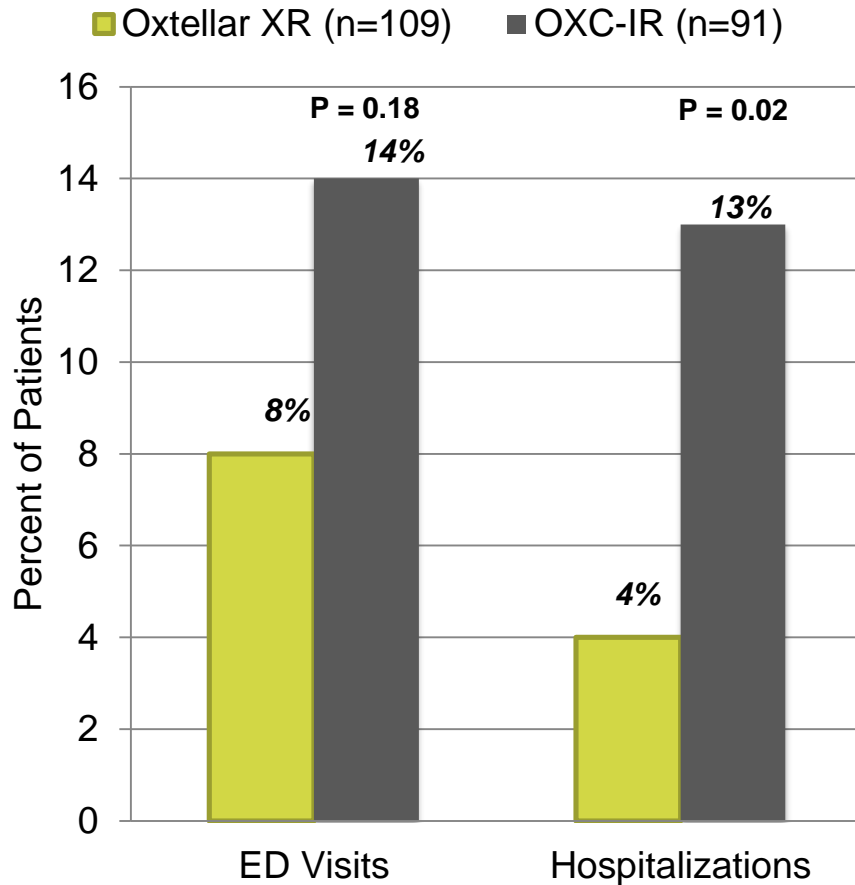
Based on comparison of Oxtellar XR (SPN-804O) Phase III vs. Trileptal PI (adjunctive therapy study in adults); differences in trial design exist between the two studies. Dizziness includes vertigo in Trileptal group because of change in the MedDRA system

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# Oxtellar XR®

## More Favorable Clinical Outcomes & Greater Adherence Compared to OXC-IR<sup>1</sup>



<sup>1</sup>O'Neal W, et al., Adherence and Resource Utilization with Extended-Release Oxtellar XR® or Immediate-Release Oxcarbazepine (OXC-IR) Treatment in Clinical Practice: A Standardized Case Record Review. Neurology 2015;84 (P1.244)

# Psychiatry Pipeline



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## SPN-810 & SPN-812

# SPN-810: Overview of Aggression

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## Adaptive Aggression

- “Appropriate”
- Serves identifiable goals
- Brain structure and / or function not impaired
- Does not require mental health research or treatment

## Maladaptive Aggression

- “Excessive” or “Inappropriate”
- Does not serve identifiable goals
- Brain structure and / or function impaired
- May require psychiatric and pharmacological treatment

# Understanding Impulsive Aggression (IA)

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- IA is a subtype of Maladaptive Aggression
- Impulsivity can be defined neurobiologically
  - Short fuse that causes impairment in self-control
- IA occurs across multiple disorders including
  - ADHD, autism, bipolar disorder, schizophrenia, Alzheimer's, PTSD and disorders of traumatic stress



# SPN-810: Novel Product for IA



**Granted Fast Track  
Development Designation**



**Market Opportunity  
+\$5.5B**

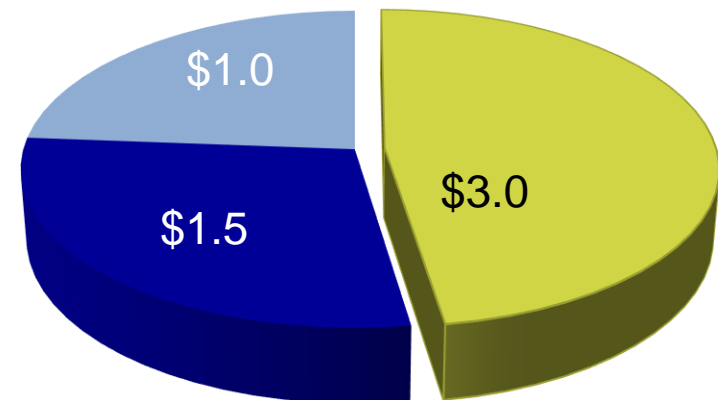
**1<sup>st</sup>**

**Expected to be first product  
approved to treat IA**

**2016**

**Two ongoing Phase III  
trials**

**Phase III data, mid-2017**



■ ADHD  
■ Autism  
■ Bipolar Disorder



# SPN-810 Market Opportunity for IA in ADHD

	Percent	Projected 2019 Prescriptions
<b>ADHD Market Prescriptions</b>		75.6 Million
<b>Child and Adolescent ADHD Prescriptions</b> Child Psychiatrists, Child Neurologists, Psychiatrists, and Top Pediatrician Deciles*		19.2 Million
<b>Prevalence of Impulsive Aggression</b>	22.5 - 32%	4.3 – 6.1 Million
	Peak Market Share	SPN-810 Potential Prescriptions
<b>SPN-810 Peak Demand</b>	<b>16 - 20%</b>	<b>0.7 – 1.2 Million**</b>

SPN-810 Market Sizing and Demand Study; April 2015; \*Assumes prevalence and demand from quantitative research is applicable to high ADHD pediatrician prescribers

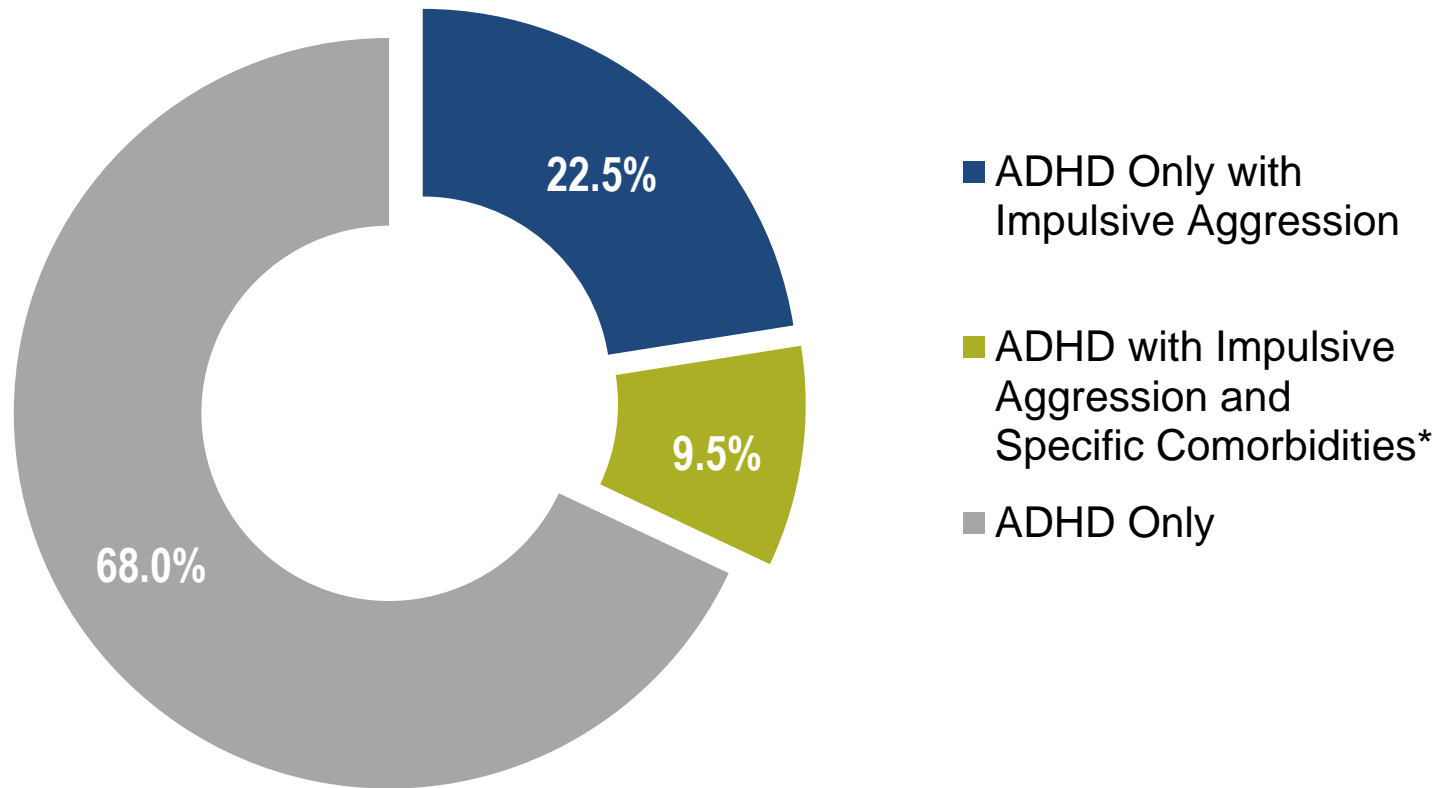
\*\* Using 2019 market projections; assumes peak 3–5 years post-launch

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# Prevalence of Impulsive Aggression in Addressable ADHD Population is 22.5–32%

## Prevalence of Impulsive Aggression in Children



SPN-810 Market Sizing and Demand Study; April 2015;

\*Specific co-morbidities: autism, epilepsy, IQ<70, neurological disorders, bipolar disorder, schizophrenia

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# Additional Market Opportunities in Autism & Bipolar

Primary Diagnosis	Prevalence of Impulsive Aggression in Children and Adolescents	Projected 2019 Prescriptions
Autism	≈45%	1.6 Million
Bipolar Disorder	≈66%	2.7 Million
	Peak Market Share	SPN-810 Potential Prescriptions
SPN-810 Peak Demand in Autism and Bipolar Disorder	16 – 20%*	0.7 – 0.9 Million

CDC/US Census; IMS; Qualitative Opportunity Assessment Research 2014; \* Assumption that quantitative research in ADHD is applicable to Autism and Bipolar Disorder

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# SPN-810: A Billion Dollar Product for Supernus

## Potential Gross Revenue

ADHD

\$400–\$700 Million

Autism and Bipolar Disorder

\$400–\$500 Million

Total at Peak

\$800–\$1,200 Million

+

### **Other Impulsive Aggression Opportunities:**

*Schizophrenia, Alzheimer's, Oppositional Defiant Disorder, etc.*



# SPN-810 Phase IIb Study Demonstrated Proof of Concept in IA in ADHD Patients

- Extended release molindone
- Randomized, double-blind, placebo-controlled, multicenter
- 6–12 year old patients with IA co-morbid with ADHD
- Primary endpoint: change from baseline to endpoint (Visit 10) in R-MOAS\* ratings.
- Optional six-month open-label extension

	Children < 30 kg (mg/day)	Children ≥ 30 kg (mg/day)
<b>Low Dose</b>	12	18
<b>Medium Dose</b>	24	36
<b>High Dose</b>	36	54

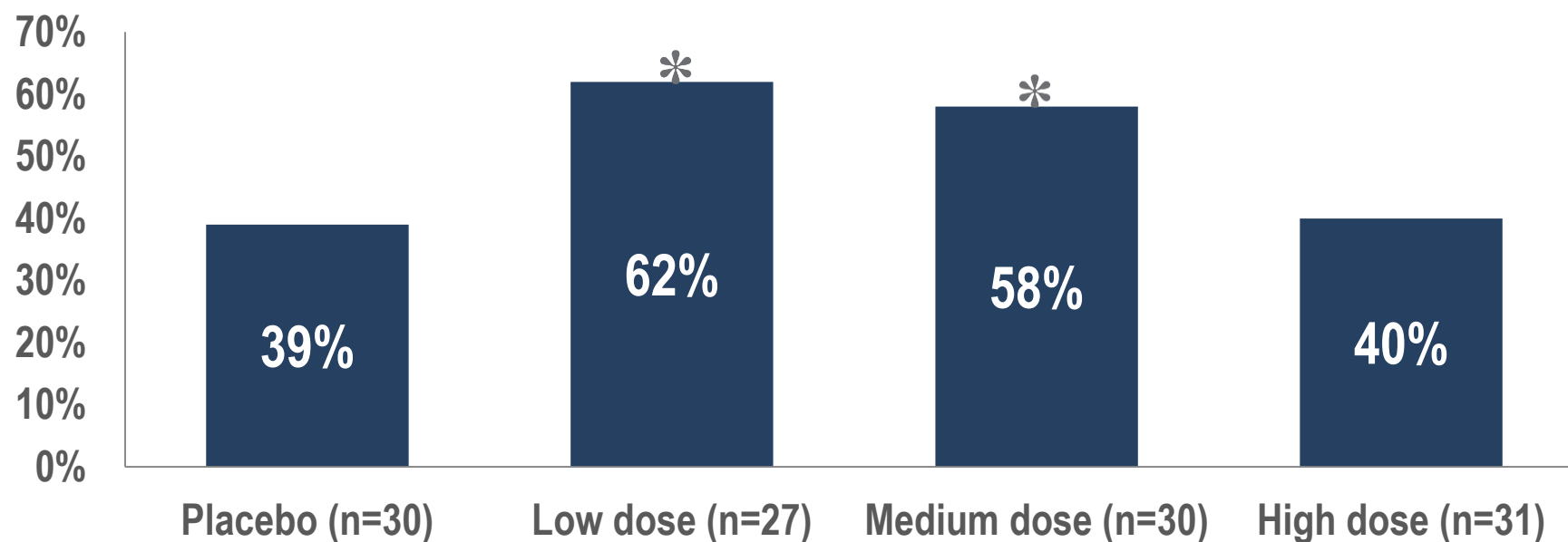
\* Retrospective modified overt aggression scale

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# SPN-810: Greater Improvement from Baseline<sup>1</sup>

Primary Endpoint: Change from Baseline at Visit 10 in R-MOAS<sup>#</sup> Score  
LOCF, ITT Population

## Improvement vs. Baseline



\* P<0.05 vs. placebo

<sup>#</sup> Retrospective modified overt aggression scale

<sup>1</sup> Primary Endpoint based on FDA input

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# SPN-810: Improved Remission Rate at End of Study<sup>1</sup>

R-MOAS	Placebo (n=30)	Low Dose (n=27)	Medium Dose (n=30)	High Dose (n=31)
<b>Subjects Remitted</b>	6 (20%)	14 (52%)	12 (40%)	10 (32%)
<b>P-value for Remission Rate</b>		<b>0.009</b>	<b>0.043</b>	0.276

P significant at  $p < 0.05$

Remission: RMOAS $\leq$ 10

<sup>1</sup> Primary Endpoint before FDA input

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# SPN-810 Was Well-Tolerated

Most Common Adverse Events* (Reported by $\geq 5\%$ of Subjects in one or more treatment groups)	Placebo (n=31) N (%)	All Treatment (n=90) N (%)
Headache	4 (13%)	9 (10%)
Sedation	2 (7%)	8 (9%)
Somnolence	1 (3%)	2 (2%)
Abdominal Pain	1 (3%)	5 (6%)
Increased Appetite	1 (3%)	7 (8%)
Decreased Appetite	0	5 (6%)
Fatigue	0	3 (3%)
Abnormal Weight Gain	0	1 (1%)
<b>Extrapyramidal Symptoms (EPS)</b>		
Dystonia	0 (0)	2 (2%) [Severe]
Akathisia	1 (3.2%) [Mild]	0 (0)
Dyskinesia	0 (0)	1 (1%) [Moderate]

\*There is no statistically significant difference in the rate of incidence of AEs between the placebo arm and all active treatment groups combined

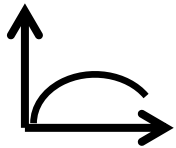
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# SPN-812: Novel Non-Stimulant ADHD Product



Market Opportunity  
**\$2.5B**



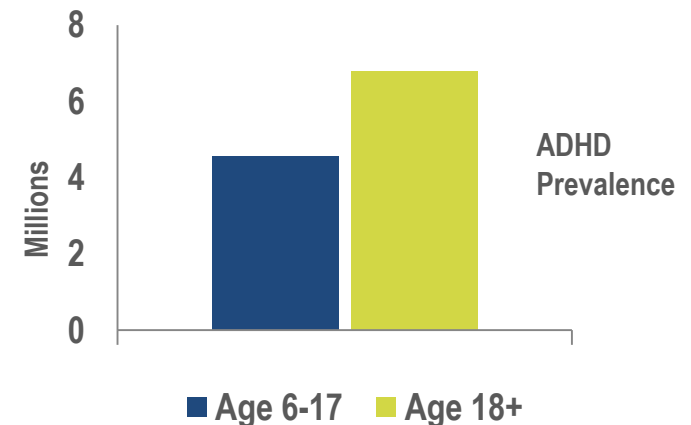
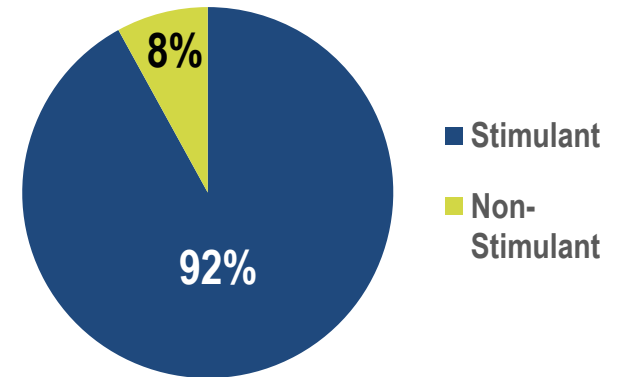
Demonstrated efficacy in  
Phase IIa in ADHD

**2016**

Ongoing Phase IIb trial

Phase IIb data, early  
**2017**

Total ADHD Prescriptions



ADHD Prescriptions per SHA TRx data, December 2014

Centers for Disease Control "Trends in the Parent-Report of Health Care Provider-Diagnosed and Medicated ADHD: United States, 2003–2011; WebMD; Datamonitor

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# Financial Summary and Guidance

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## First Quarter 2016 Financial Results

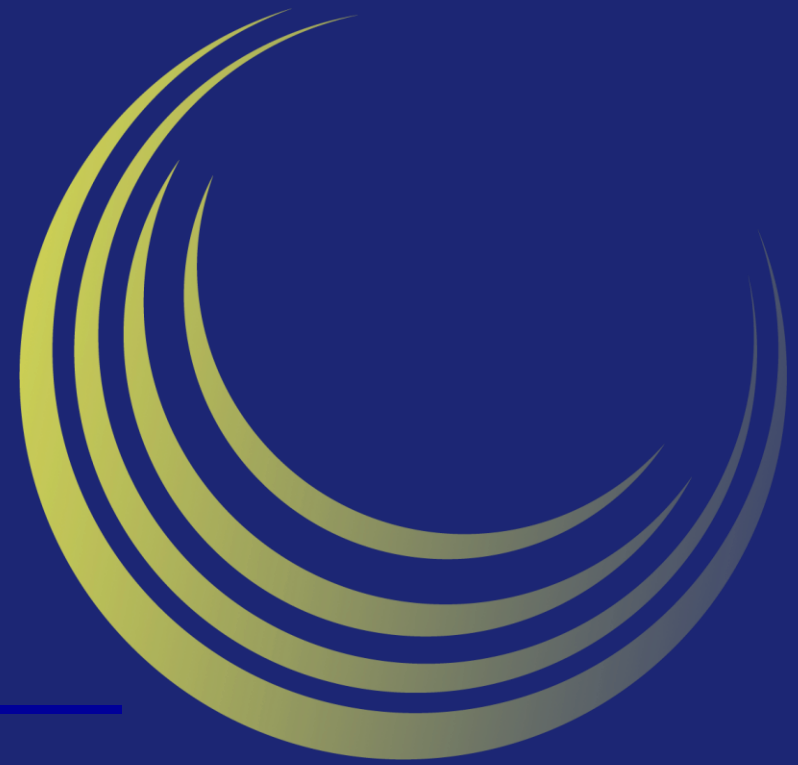
- Net product sales of \$43.0 million, up 53.1% over prior year
- Operating income of \$5.3 million, up 55.0% over prior year
- Diluted EPS of \$0.08, compared to \$0.02 prior year
- March 31, 2016 balance for cash, cash equivalents, marketable and long term marketable securities of \$114.0 million

## Full Year 2016 Financial Guidance<sup>1</sup>

- Net product sales: \$200 million - \$210 million
- Operating income: \$28 million - \$35 million
  - R&D expenses: \$55 million - \$65 million

<sup>1</sup>Guidance as provided on May 3, 2016 which has not been updated.

# Positioned for Continued Success



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## Maximize Growth & Profitability

**>\$500 Million in Peak Revenue For Neurology Portfolio**

## Advance Pipeline Towards Commercialization

**Strong & Proven R&D Capability**

## Execute on Strategic Opportunities