UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 15, 2023

Axsome Therapeutics, Inc. (Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation)

001-37635 (Commission File Number)

45-4241907 (IRS Employer Identification No.)

One World Trade Center, 22nd Floor New York, New York (Address of Principal Executive Offices)

10007 (Zip Code)

Registrant's Telephone Number, Including Area Code: (212) 332-3241

(Former Name or Former Address, if Changed Since Last Report)

		-						
Che	ck the appropriate box below if the Form 8-K filing is intende	d to simultaneously satisfy the filin	g obligation of the registrant under any of the following provisions:					
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)							
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)							
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))							
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))							
	Securities registered pursuant to Section 12(b) of the Act:							
	Trading							
	Title of each class	Symbol(s)	Name of each exchange on which registered					
	Common Stock, Par Value \$0.0001 Per Share	AXSM	Nasdaq Global Market					
	cate by check mark whether the registrant is an emerging grov Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).		5 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of					
Em	erging growth company \square							
	n emerging growth company, indicate by check mark if the regonnting standards provided pursuant to Section 13(a) of the Ex		tended transition period for complying with any new or revised financial					

Item 8.01 Other Events.

On August 15, 2023, the Company updated its corporate presentation and posted such corporate presentation to the Company's website. The updated corporate presentation is filed as Exhibit 99.1 hereto and incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description		
99.1	Corporate Presentation.		
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).		

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Axsome Therapeutics, Inc.

/s/ Herriot Tabuteau, M.D. Date: August 15, 2023 By:

Name:

Herriot Tabuteau, M.D. President and Chief Executive Officer Title:

nasdaq: axsm



Corporate Presentation August 2023

Forward Looking Statements & Safe Harbor

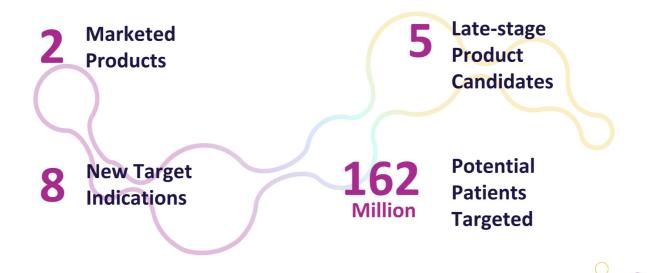
Certain information contained in this presentation may include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. We may, in some cases, use terms such as "predicts," "believes," "potential," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. In particular, the Company's statements regarding trends and potential future results are examples of such forward-looking statements. The forward-looking statements. The particular, the Company's statements regarding trends and potential commercial success of our Sunosi® and Auvelity® products and the success of our efforts to obtain any additional indication(s) with respect to solriamfetol and/or AXS-05; the success, timing and cost of our ongoing clinical trials and anticipated clinical trials for our current product candidates, including statements regarding the timing of initiation, pace of expenses), futility analyses and receipt of interim results, which ally fund our disclosed clinical trials, which assumes no material changes to our currently projected revenues or expenses), futility analyses and receipt of interim results, which are not necessarily indicative of the final results of our ongoing clinical trials, and the number or type of studies or nature of results necessary to support the filing of a new drug application ("NDA") for any of our current product candidates; our ability to fund additional clinical trials to continue the advancement of our product candidates; whether issues identified by FDA in the complete response letter may impact the potential approvability of the Company's NDA for AXS-07 for the acute treatment of migraine in adults with or without aura, pursuant to our special protocol assessment for the MOMENTUM clinical trial; the Company's not other results and development programs and collaborations; the successful

This presentation contains statements regarding the Company's observations based upon the reported clinical data. This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about the Company's industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Neither we nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation. In addition, these projections, assumptions and estimates are necessarily subject to a high degree of uncertainty and risk.

Axsome, Auvelity, Sunosi, and MoSEIC, are trademarks or registered trademarks of Axsome Therapeutics, Inc. or its affiliates. Except as with respect to Auvelity and Sunosi for their approved indications, the development products referenced herein have not been approved by the FDA.

axsome

Rapidly Growing, CNS-Focused Biopharma



Leading CNS Portfolio

Product	MOA	Phase 1	Phase 2	Phase 3	NDA	Marketed
dextromethorphan HBr and bupropion HCI) xtended-release tablets 45mg/105mg	NMDA receptor antagonist and sigma-1 receptor agonist, aminoketone CYP2D6 inhibitor	Major Depressive Disorder (MDD)				
SUNOSI. (solriamfetol) (v	Dual-acting dopamine and norepinephrine reuptake inhibitor (DNRI) and TAAR1 agonist	Excessive Daytime Sleepiness (EDS) Associated with Narcolepsy or Obstructive Sleep Apnea (OSA)				
AXS-05 NMDA receptor antagonist and sigma-1 receptor agonist, aminoketone CYP2D6 inhibitor	Alzheimer's Disease Agitati		FDA Breakthrough Therapy Designation			
		Smoking Cessation				
AXS-07	MoSEIC™ COX-2 pref. inhibitor + 5- HT _{1B/1D} agonist	Migraine				
AXS-12	Highly selective NE reuptake inhibitor	Narcolepsy		FDA Orphan Drug Designation		
AXS-14	Enantiomerically purified highly selective NE reuptake inhibitor	Fibromyalgia				
Dual-acting dopamine and norepinephrine reputate inhibitor (ANSI) and ITA PAP accept the NASI accept the N		Attention Deficit Hyperacti	vity Disorder (ADHD)			
		Binge Eating Disorder (BEI	0)			
	(Sittly and Franci agoinst	Shift Work Disorder (SWD)				

AXS-05, AXS-07, AXS-14, and solriamfetol for ADHD are not approved by the FDA, and their safety and effectiveness have not been established Abbreviations:

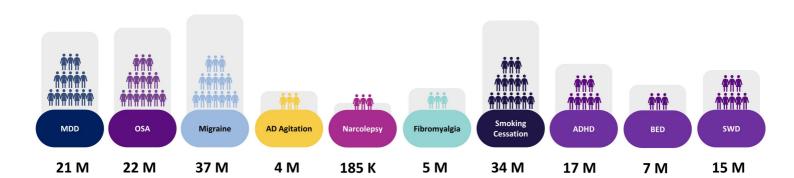
CNS = Central Nervous System; MOA = Mechanism of Action; NMDA = N-Methyl-D-aspartate; COX-2 = Cyclooxygenase-2; 5-HT = 5-Hydroxytryptamine; NE = Norepinephrine.

CYP2D6 = Cytochrome P450 Family 2 Subfamily D Member 6; MoSEIC = Molecular Solubility Enhanced Inclusion Complex

Please see full Prescribing Information for Auvelity at www.Auvelity.com. Please see full Prescribing Information for Sunosi at www.Sunosi.com.



Marketed and Late-stage CNS Portfolio with Potential to Impact the Lives of >162M U.S. Patients

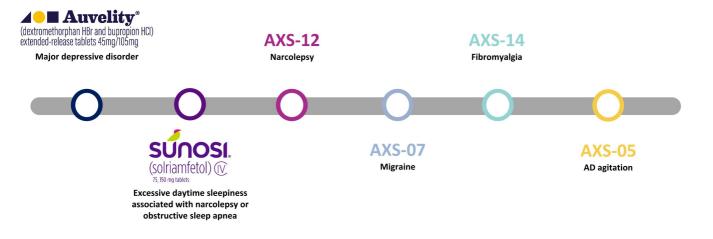


Abbreviations:

MDD = Major Depressive Disorder; OSA = Obstructive Sleep Apnea; AD = Alzheimer's Disease; ADHD = Attention Deficit Hyperactivity Disorder; BED = binge eating disorder; SWSD = shift work disorder



Potentially Marketed Indications by 2025



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Treating adult patients living with major depressive disorder



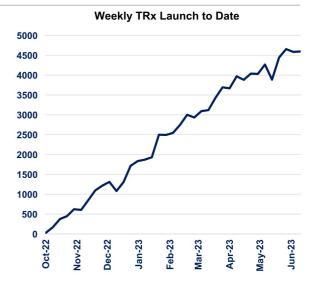
First and only oral rapid acting NMDA receptor antagonist for MDD¹⁻²

New approach to treat MDD that is different from other oral antidepressants approved in more than 60 years¹⁻³

Rapid symptom improvement starting at Week 1, sustained at Week 6 vs placebo¹

Rapid remission as early as Week 2, sustained and increased vs control through Week 6^4





Source: Symphony METYS

Abbreviations: TRx = total prescriptions; NMDA = N-Methyl-D-aspartate; MDD = major depressive disorder

1. Auvelity [Prescribing Information]. Axsome Therapeutics, Inc., New York, NY 2. FDA Depression Medicines. https://www.fda.gov/media/132665/download. Accessed March 21, 2022. 3. Thomas D, and Wessel C. The state of innovation in highly prevalent chronic diseases volume I: Depression Leopression Depression Depression Leopression Leo

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Improving wakefulness in adult patients with EDS associated with narcolepsy or OSA

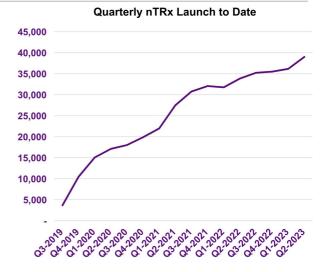


First and only DNRI indicated for EDS associated with narcolepsy or OSA¹

First and only wakefulness promoting agent proven to improve wakefulness through 9 hours¹

90% of patients reported feeling better with Sunosi 150 mg²





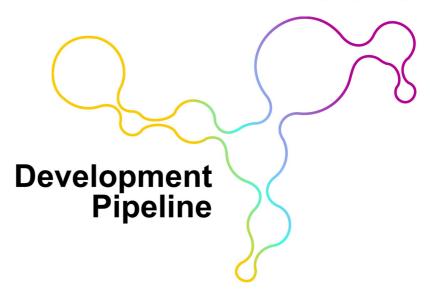
Source: Symphony METYS. nTRx normalizes number of pills in each Trx for 30-day period

Abbreviations: nTRx = normalized total prescriptions; EDS = excessive daytime sleepiness; OSA = obstructive sleep apnea; DNRI = dopamine-norepinephrine reuptake inhibitor 1. SUNOSI [Prescribing Information]. Axsome Therapeutics, Inc., New York, NY: 2. Schweitzer PK et al. Am J Resp Crit Care Med. 2019;199(11):1421-1431.



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AXS-05

(dextromethorphan-bupropion)

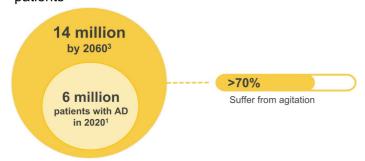
a new approach to treating multiple CNS conditions

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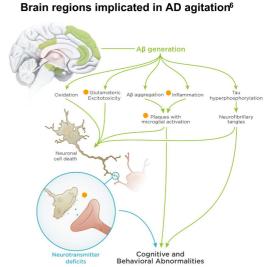
Alzheimer's Disease Agitation: High Unmet Medical Need, Novel Approach



· Agitation is seen in up to 70% of Alzheimer's disease patients1,2



- Associated with accelerated cognitive decline, earlier nursing home placement, increased mortality risk^{4,5}
- High unmet medical need for safe and effective options
- AXS-05 pharmacology relevant to implicated disease pathways



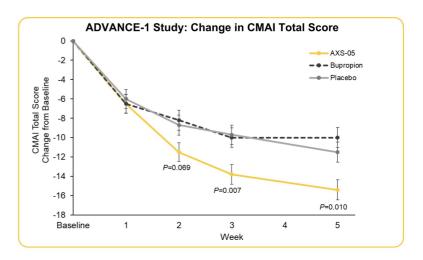
AXS-05 pharmacological actions^{7,8}

1. Alzheimer's Association. Alzheimer's Dement. 2020;16(3):391+. 2. Tractenberg R, et al. J Neuropsychiatry Clin Neurosci. 2002;14:11-18. 3. Alzheimers Dement. 2021 Mar;17(3):327-406. 4. Porsteinsson AP, et al. Expert Opin Pharmacother. 2017; 18:6, 611-620. 5. Lee D et al Expert Opin. On Pharm. 2023, https://doi.org/10.1080/14656566.2023.2195539 6. Rosenberg PB, et al. *Mol Aspects Med.* 2015;0: 25–37. 7. Stahl SM. *CNS Spectr.* 2019;24:461-466. 8. Cheng W, et al. Mol Med Rep. 2015 Feb;11(2):1132-8 @ Axsome Therapeutics, Inc.

Alzheimer's Disease Agitation: Clinical Results and Program Status



- Primary endpoints met in two controlled trials:
 - ADVANCE-1 Phase 2/3, parallel group trial
 - ACCORD Phase 3, randomized withdrawal trial
- ADVANCE-2 Phase 3 trial ongoing, with expected completion by 1H 2024
- FDA Breakthrough Therapy Designation received



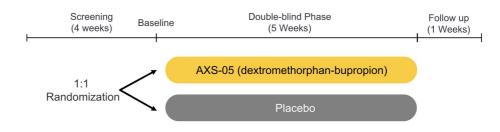
Abbreviations: CMAI = Cohen Mansfield Agitation Inventory



Alzheimer's Disease Agitation: ADVANCE-2 Phase 3 Trial



A Phase 3 trial to assess efficacy and safety of AXS-05 as compared to placebo in the treatment of Alzheimer's disease agitation.



- Primary Endpoint: Efficacy of AXS-05 compared to placebo on the change from baseline in CMAI total score
- · Key Inclusion Criteria:
 - · Male or female 65-90 years old
 - Diagnosis of probable AD and of clinically significant agitation resulting from probable AD
- Target Enrollment: 350
- Topline Data: 1H 2024





Fast Facts

- Smoking is single largest cause of preventable death in the U.S.¹
- 70% of smokers want to quit²
- Only 3-5% who attempt to quit without assistance are successful for 6-12 months²



- AXS-05 represents a potentially new mechanism of action for smoking cessation
- Positive FDA Pre-IND meeting guidance received from the FDA – can proceed to pivotal Phase 2/3 trial
- Planned trial initiation in 4Q 2023 or 1Q 2024



Abbreviations: NMDA = N-methyl D-aspartate
1. U.S. Department of Health and Human Services. The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. 2014.
2. Hughes JR, et al. Addiction. 2004;99(1):29-38



AXS-07

(MoSEIC™ meloxicam-rizatriptan)

a multi-mechanistic approach to treating migraine

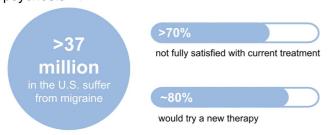
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Migraine:

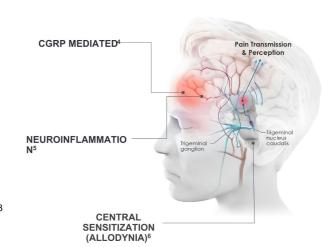
Significant Need for More Efficacious Treatments



 Unmet need for improved efficacy in migraine: disability on par with dementia, quadriplegia, active psychosis^{1,2}:



- \$78 billion direct and indirect costs in the U.S. each year³
- Mechanisms of AXS-07 address multiple disordered physiological processes observed during migraine attacks





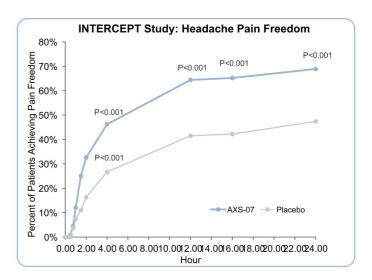


Migraine:

Clinical Results and Program Status

AXS-07

- Rapid and sustained efficacy as compared to placebo and active comparator rizatriptan, in three positive Phase 3 trials:
 - MOMENTUM trial, in patients with history of inadequate response, vs. placebo and rizatriptan
 - INTERCEPT trial, in early treatment, vs. placebo
 - MOVEMENT trial, long-term open-label treatment, up to 12 months
- Class 2 NDA resubmission anticipated in the first half of 2024







AXS-12

(reboxetine)

a potentially new treatment option for narcolepsy

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Narcolepsy AXS-12

 Narcolepsy is a debilitating disorder characterized by excessive daytime sleepiness and cataplexy, with limited treatment options



- Loss of excitatory hypocretin/orexin neurons in the brain lead to dysregulation of norepinephrine resulting¹:
 - Loss of muscle tone while awake (cataplexy)
 - Decreased wakefulness during the day (EDS)
- AXS-12 (reboxetine) improves regulation of norepinephrine signaling in narcolepsy

Wakefulness
Reduced Excessive daytime sleepiness
Cortex

Hypocretin/orexin
neurons
(lost in narcolepsy)

Hypothalamus
Amygdala
Locus coertileus
(norepinephrine)
Reduced: Cataplexy

Norepinephrine
Hypocretin/orexin
Amygdala inhibitory



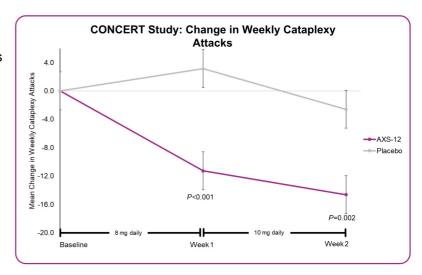
1. Szabo ST, et al. Sleep Medicine Reviews 43 (2019) 23-36

Narcolepsy:

Clinical Results and Program Status

AXS-12

- Positive Phase 2 results with AXS-12
 - · Significant reduction in cataplexy attacks
 - Significant improvement in excessive daytime sleepiness
 - Significant improvement in cognitive function
- SYMPHONY Phase 3 trial ongoing, with expected completion in 4Q 2023

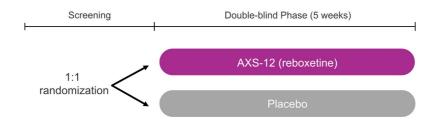




Narcolepsy: SYMPHONY Phase 3 Trial



A Phase 3 trial to assess efficacy and safety of AXS-12 as compared to placebo in the treatment of cataplexy in narcolepsy.



- Primary Endpoint: Change in the frequency of cataplexy attacks
- · Key Inclusion Criteria:
 - Male or female 15-75 years old
 - Primary diagnosis of narcolepsy with cataplexy
- Trial Completion: expected in 4Q 2023





AXS-14

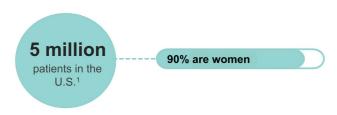
(esreboxetine)

a potentially new treatment option for fibromyalgia

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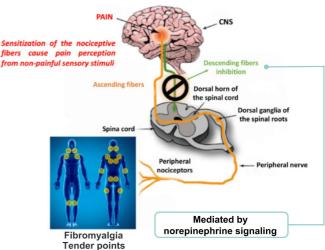
Fibromyalgia AXS-14

 Debilitating, chronic, CNS disorder characterized by widespread pain, fatigue, disturbed sleep, depression, and cognitive impairment; ~90% affected are women



- Limited treatment options with only 3 approved agents: variable efficacy, and do not address all symptoms
- AXS-14 (esreboxetine) increases descending norepinephrine inhibition of pain signaling

Pathways influencing pain sensitivity in fibromyalgia²



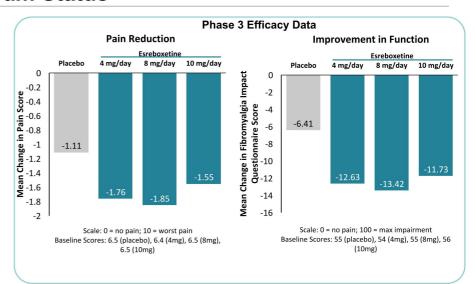
1. Decision Resources Group 2019 2. Adapted from Siracusa, R., et al. Fibromyalgia: Pathogenesis, Mechanisms, Diagnosis and Treatment Options Update. Int. J. Mol. Sci. 2021, 22, 3891.



AXS-14

Fibromyalgia: Clinical Data and Program Status

- Positive Phase 3 and Phase 2 efficacy results with AXS-14 in fibromyalgia:
 - Significant reduction in pain and improvement in function
- NDA submission planned for fourth quarter of 2023 or first quarter 2024







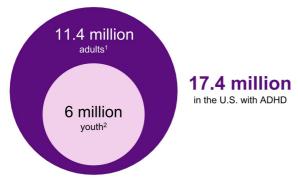
Solriamfetol

a potentially differentiated option for the treatment of CNS disorders

Attention Deficit Hyperactivity Disorder

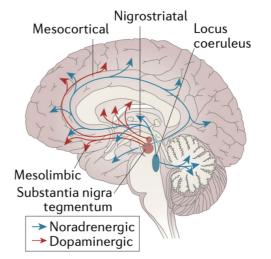
solriamfetol

· ADHD is a serious disorder characterized by inattention, hyperactivity or impulsivity



- Associated with significant impairment in social, academic, and occupational functioning or development
- Solriamfetol targets neurotransmitter pathways in the brain implicated in ADHD3

Neurotransmitter Pathways Implicated in ADHD¹



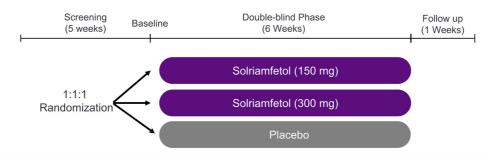


1. Kessler RC, et al. The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication. Am J Psychiatry. 2006 Apr;163(4):716-23. 2. Bitsko RH, et al. Mental health surveillance among children—United States, 2013–2019. MMWR Suppl. 2022;71(2):1-48. 3. Faraone, S. V. et al. Attention-deficit/hyperactivity disorder. Nat. Rev. Dis. Primers. 2015 © Axsome Therapeutics, Inc.

Attention Deficit Hyperactivity Disorder: FOCUS Phase 3 Trial



A Phase 3 trial to assess efficacy and safety of solriamfetol as compared to placebo in the treatment of ADHD.



- Primary Endpoint: Change in the Adult ADHD Investigator Symptom Report Scale (AISRS)
- Key Inclusion Criteria:
 - Adults, aged 18 to 55 inclusive.
 - Primary diagnosis of ADHD (inattentive, hyperactive, or combined subtype) using DSM-5 criteria and confirmed via the clinician administered ACDS
- Target Enrollment: 450
- Topline Data: 2H 2024



CNS portfolio with potential to generate total U.S. peak sales of up to \$11.5B

Program		Launch Year	Est. Peak U.S. Sales	Key Highlights
Auvelity* dextromethorphan HBr and bupropion HCI) xtended-release tablets 45mg/105mg	IDD	2022	\$1- \$3B	 Rapid and substantial efficacy, as early as week 1¹ First oral antidepressant with a new MOA in 60 years¹⁻⁴
SUNOSI. with C	sociated DSA and olepsy	2022	\$300 - \$500M	 First and only wakefulness promoting agent to improve wakefulness through hours⁵ First FDA approved dual-acting DNRI to treat EDS in OSA or narcolepsy
	eimer's Agitation	2025 est.	\$1.5 - \$3B	 Rapid and substantial effect, as early as Week 2, with no associated cognitive impairment or sedation
AXS-05 Smoking	Cessation	TBD	\$0.5 - \$1B	 Represents a potentially new mechanism of action for smoking cessation Planned Phase 2/3 trial initiation in 4Q 2023 or 1Q 2024
AXS-07 Mig	raine	2024 est.	\$0.5 - \$1B	Rapid and consistent relief with reduced symptom recurrence
AXS-12 Narc	olepsy	2025 est.	\$0.5 - \$1B	Improved cataplexy, EDS, and cognitive function
AXS-14 Fibro	mylagia	2025 est.	\$0.5 - \$1B	Reduced pain with improved function with effect on fatigue
Solriamfetol A	OHD	TBD	\$1B	Phase 3 trial ongoing; topline data expected in 2H 2024 QXSOME

Auvelity and Sunosi refs are on Slides 8 and 9, respectively. Please see full Prescribing Information for Auvelity at www.Auvelity.com. Please see full Prescribing Information for Sunosi at www.Sunosi.com.

Strong Intellectual Property and Barriers to Entry

(dextromethorphan HBr and bupropion HCI) extended-release tablets 45mg/105mg	 Protected by a robust patent estate extending out to at least 2043; Multiple pending Proprietary drug product formulation
SUNOSI. (Solriamfetol) ((V	 Protected by a robust patent estate extending out to at least 2040 / allowed claims out to 2042; Multiple pending Proprietary drug substance and drug product formulation
AXS-05	 >120 Issued U.S. Patents and >70 Issued O-U.S. Patents Claims extending to at least 2034-43; Multiple pending Proprietary drug product formulation
AXS-07	 >85 Issued U.S. Patents and >103 Issued O-U.S. Patents Claims extending to at least 2038; Multiple pending Proprietary MoSEICTM formulation and drug product formulation
AXS-12	 Orphan Drug Designation 6 issued patents; Claims extending to at least 2040; Multiple pending Proprietary drug substance and drug product formulation
AXS-14	Pending U.S. patentsProprietary drug substance and drug product formulation



Financial Snapshot

Cash Balance:	\$ 437.1 M
(as of June 30, 2023)	Ψ 437.1 Μ

Debt (Face Value): (as of June 30, 2023) \$ 180 M

Market Cap: (as of August 4, 2023) \$ 3.4 B

Shares Outstanding: 46.7 M

Options, RSUs, and Warrants Outstanding¹:

Runway to reach cash flow positivity, based on the current operating plan

Pro forma cash balance - \$468.8 M



¹ Consists of 7.93 M options, 0.78 M RSUs, and 0.080 M warrants

Leadership Team

Management

Herriot Tabuteau, MD Founder & CEO

Nick Pizzie, CPA, MBA Chief Financial Officer

Mark Jacobson, MA Chief Operating Officer

Hunter Murdock, JD General Counsel

Lori Englebert, MBA EVP, Commercial & Business Dev.



KIRKLAND & ELLIS LLP

U NOVARTIS

AMGEN

Board of Directors

Roger Jeffs, PhD

CEO

Liquidia Corporation

Former President, Co-CEO, Director United Therapeutics Corp. Prior positions at Amgen and Burroughs Wellcome

Mark Saad

Former CFO Bird Rock Bio, Inc.

Former COO of the Global Healthcare Group at UBS

Mark Coleman, MD

Director of Clinical Services National Spine and Pain Centers Diplomat of the American Board of Anesthesiology

Herriot Tabuteau, MD

Chairman



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Anticipated Upcoming Clinical and Regulatory Milestones

Regulatory and Commercial

AXS-07 Migraine NDA, planned resubmission – 1H 2024

AXS-14 Fibromyalgia NDA, planned submission – 4Q 2023 or 1Q 2024

Clinical Trial Readouts

AXS-12 SYMPHONY Phase 3 trial in narcolepsy, completion – 4Q 2023

AXS-05 ADVANCE-2 Phase 3 trial in Alzheimer's disease agitation, completion – 1H 2024

solriamfetol FOCUS Phase 3 trial in adult ADHD, completion – 2H 2024

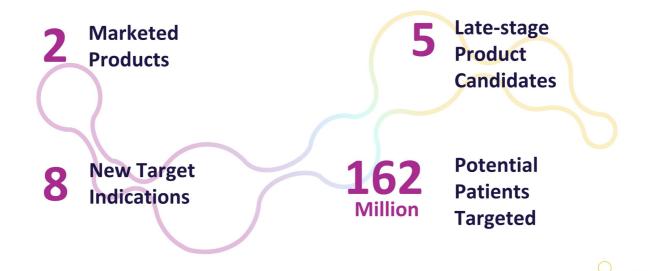
Clinical Trial Initiations

AXS-05 Phase 2/3 trial in smoking cessation, initiation – 4Q 2023 or 1Q 2024

solriamfetol Phase 3 trial in binge eating disorder – 4Q 2023 solriamfetol Phase 3 trial in shift work disorder – 1Q 2024



Rapidly Growing, CNS-Focused Biopharma





thank you

for more information, please contact:

mark jacobson chief operating officer 212-332-3243

mjacobson@axsome.com

www.axsome.com

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