nasdaq: axsm

Expanding Axsome's Leadership in Neuroscience

Axsome to Acquire Sunosi® (solriamfetol) from Jazz Pharmaceuticals

March 28, 2022

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 include risks and uncertainties, including, but not limited to, the expected closing of the transaction referenced in this presentation, 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 enrollment and completion of the trials (including our ability to fully fund our disclosed clinical trials, which assumes no material changes to our currently projected 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; the timing of and our ability to obtain and maintain U.S. Food and Drug Administration (“FDA”) or other regulatory authority approval of, or other action with respect to, our product candidates (including, but not limited to, whether potential filing issues or issues identified by FDA during the substantive review may impact the potential approvability of the Company’s NDA submission for AXS-05 in MDD or the timing of such approval, and whether the FDA will agree with the Company’s discontinuation of the bupropion treatment arm of the ADVANCE study in accordance with the independent data monitoring committee’s recommendations); whether issues identified by FDA during the substantive review 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 potential for the ASCEND clinical trial, combined with the GEMINI clinical trial results, to provide a basis for approval of AXS-05 for the treatment of major depressive disorder and accelerate its development timeline and commercial path to patients; the Company’s ability to successfully defend its intellectual property or obtain the necessary licenses at a cost acceptable to the Company, if at all; the successful implementation of the Company’s research and development programs and collaborations; the success of the Company’s license agreements; the acceptance by the market of the Company’s product candidates, if approved; the Company’s anticipated capital requirements, including the amount of capital required for the Company’s commercial launch of its product candidates, and the potential impact on the Company’s anticipated cash runway; unforeseen circumstances or other disruptions to normal business operations arising from or related to COVID-19; and other factors, including general economic conditions and regulatory developments, not within the Company’s control. The factors discussed herein could cause actual results and developments to be materially different from those expressed in or implied by such statements. The forward-looking statements are made only as of the date of this presentation and the Company undertakes no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstance.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our 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.

Expanding Axsome's Leadership in Neuroscience

AXS-05	AXS-07	+ SUNOSI (solriamfetol) IV
Oral NMDA Receptor Antagonist with Multimodal Activity	MoSEIC™ COX-2 Pref. Inhibitor + 5-$HT_{1B/1D}$ Agonist	DNRI Dopamine Norepinephrine Reuptake Inhibitor
Major Depressive Disorder	**Migraine**	**EDS Associated with Narcolepsy or OSA**
NDA under Review	NDA under Review	Approved

Potentially
Three
New, Marketed Neuroscience Products in 2022

Strong Strategic Fit and Financial Benefits

Adds a Third High-potential Commercial-stage CNS Asset to Axsome Portfolio

- Transaction will immediately accelerate Axsome's transition to a global commercial entity ahead of potential near-term launches of AXS-05 in depression and AXS-07 in migraine in 2022
- Sunosi has high clinical and commercial potential based on strong efficacy, differentiated MOA, potential new indications, and long patent expiry

Highly Synergistic with Existing Axsome Portfolio and DCC™ Approach

- HCP targets for AXS-05 (psychiatry) and AXS-07 (neurology) have significant overlap with high potential Sunosi prescribers for current and potential future indications
- Axsome's Digital Centric Commercialization (DCC™) platform should optimize physician targeting and engagement, and promotional spend for Sunosi

Expected to Deliver Substantial Shareholder Value

- Accelerates sales trajectory, and potentially time to profitability
- Further expands development pipeline with potential new indications
- Sunosi will be immediately revenue generating upon closing; expected to be breakeven to Axsome's operating plan in 2023 and substantially accretive thereafter

Sunosi Overview

Differentiated Profile

- First and only FDA-approved dual-acting DNRI to treat EDS in adults with narcolepsy or OSA
- Improves wakefulness and reduces EDS

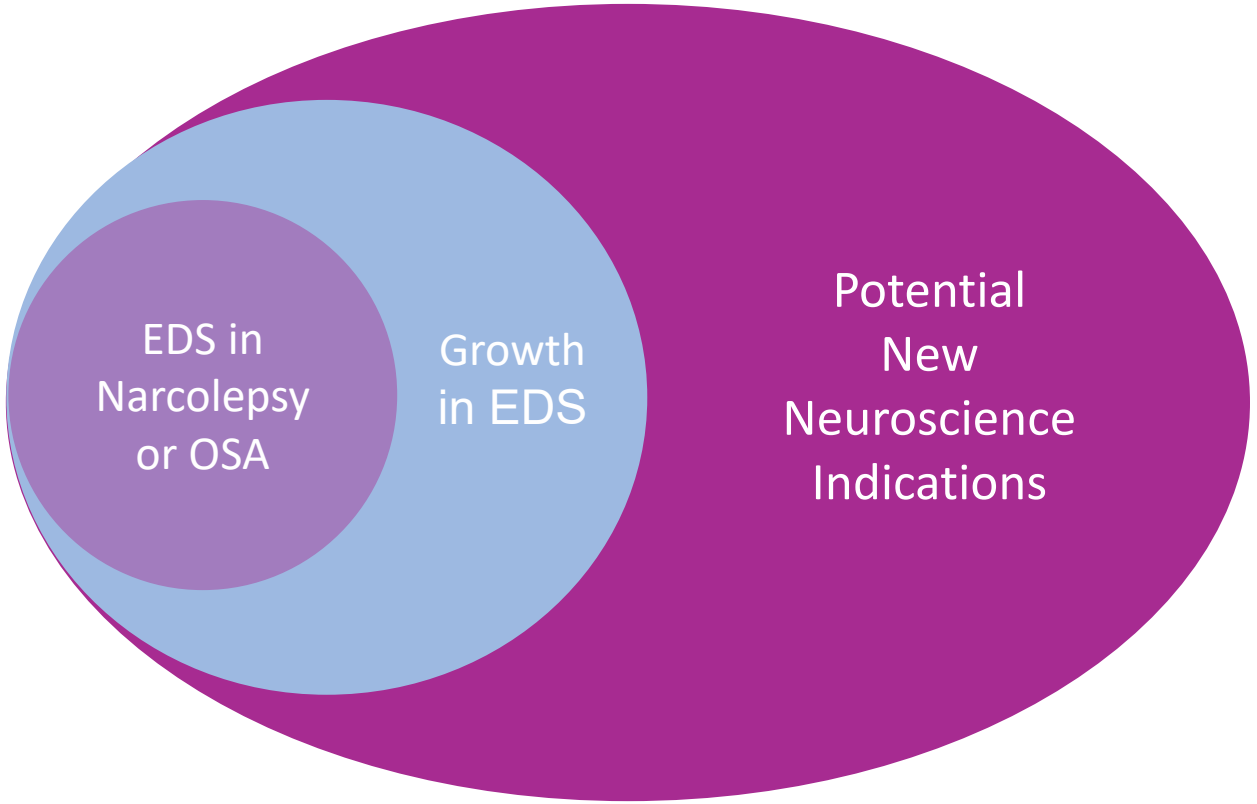
Performance to Date

- Launched in 2019 in the U.S., and 2020 in the E.U.
- 2021 sales of $57.9M, year-over-year growth of 104%
- 90% of commercial lives covered

Anticipated Long-Lived IP

- Patent expiries out to 2040

Sunosi Has Substantial Revenue Potential



>$1 billion

peak potential with current and potential future indications

- Narcolepsy remains an unmet need, and OSA has an extremely low drug treatment rate (~6%)
- ~12 million diagnosed OSA patients in U.S.
- Potential new high-value indications in psychiatry and neurology to be explored

Target Sunosi Prescribers Overlap with Existing Axsome Portfolio

EDS in OSA and Narcolepsy Key Prescribers

Prescriber Overlap with Existing Axsome Portfolio

Psychiatrist

AXS-05

Major Depressive Disorder
NDA under Review

Neurologist

AXS-07

Migraine

NDA under Review

Sleep Specialist

AXS-12

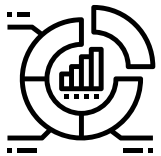
Cataplexy in Narcolepsy
Phase 3 Ongoing

Depression and migraine patients have among the highest prevalence of clinically significant EDS (37%-50%)[1,2]

1) A.F. Stroe et al. / Sleep Medicine 11 (2010) 890–896; 2) M. Hein et al. Journal of Affective Disorders 243 (2019) 23–32

Digital Centric Commercialization (DCC)™

Optimized engagements and HCP targeting via an integrated platform



Real-time Data

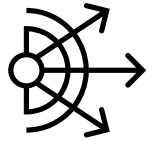
Insight-driven, quick analyses of real-time data from customer engagements

Seamless Integration

Fully integrated data, systems infrastructure, and Veeva partnership

Sophisticated Analytics

Analysis of customer engagements and behavior through AI modeling technology and expert data-science analysts



Targeted Deployment

Right customer, right channel, right message – Effective and efficient deployment of reps and content

Dedicated Digital Engagement team

Commitment to transforming the CNS treatment approach through innovation

DCC will further leverage Axsome's therapeutic focus to increase reach to key Sunosi prescriber groups

Transaction Specifics

Asset and Territory	• Sunosi (solriamfetol) • Worldwide rights except for certain Asian markets including China, Korea, and Japan
Financial Terms	• Jazz to receive from Axsome: $53 million upfront; high single-digit royalty for the current indication and mid single-digit royalty for any future indication, of net sales in the U.S. • Axsome to assume the commitments of Jazz to SK Biopharma and Aerial Biopharma: single-digit tiered royalties on Axsome's sales of Sunosi, and up to $165 million in revenue milestones and $1 million in development milestones
Financing	• Existing $300 million term loan facility with Hercules Capital, Inc.
Financial Impact	• Immediately revenue generating upon closing • Small loss in 2022, breakeven to Axsome's operating plan in 2023, significantly accretive thereafter
Approvals and Timing	• The transaction has been unanimously approved by Axsome's Board of Directors • Anticipated closings in the second quarter of 2022 (separate closings for U.S. and Ex-U.S. territories) • Transaction subject to customary closing conditions, including the expiration or termination of the HSR waiting period

Transformational Acquisition to Deliver Significant Value

- **Anticipated to deliver substantial shareholder value.** Sunosi will be immediately revenue generating upon closing, and is expected to be breakeven to Axsome's operating plan in 2023 and substantially accretive thereafter
- **Potential for rapid development in new high-value indications** for Sunosi in both psychiatry and neurology. In addition, Axsome's DCC™ platform will increase reach to key Sunosi prescriber groups
- **Highly synergistic with Axsome's existing neuroscience portfolio** and commercialization plans for AXS-05 and AXS-07, both of which are undergoing NDA reviews with anticipated FDA actions this year

Acquisition immediately transforms Axsome into a global commercial entity upon closing, and accelerates our growth as a premier biopharmaceutical company focused on **delivering potentially life-changing medicines to people living with serious CNS conditions**

Robust, Late-Stage Neuroscience Pipeline

Product Candidate	MOA	Phase 1	Phase 2	Phase 3	NDA
AXS-05	NMDA receptor antagonist with multimodal activity	**Major Depressive Disorder:** Breakthrough Therapy Designation & Priority Review **Alzheimer's Disease Agitation:** 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	**Cataplexy in Narcolepsy:** Orphan Drug Designation			
AXS-14	Highly selective NE reuptake inhibitor	**Fibromyalgia**			

\+ SUNOSI™ (solriamfetol) IV

- EDS Associated with Narcolepsy or OSA
- Potential New Indications

The investigational candidates listed are not approved by the FDA and safety and effectiveness have not been established
Abbreviations: MOA = Mechanism of Action; NE = Norepinephrine.

axsome

Q&A