Sage Therapeutics®

Second Quarter 2024 Financial Results

July 31, 2024

Safe Harbor Statement

- The slides presented today and the accompanying oral presentations contain forward-looking statements, which may be identified by the use of words such as “may,” “might,” “will,” “should,” “can,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “project,” “intend,” “future,” “opportunity”, “goal”, “mission”, "vision", “potential,” “target”, or “continue,” and other similar expressions.
- Forward-looking statements in this presentation include statements regarding: plans, expectations, strategy and goals for commercialization of ZURZUVAE as a treatment for women with PPD, including our goal for ZURZUVAE to become first line therapy and standard of care in this indication, our reimbursement and access expectations, and plans and goals related to other aspects of commercialization; our belief in the potential benefit and profile of ZURZUVAE in the treatment of PPD; the potential for success of our commercialization of ZURZUVAE for women with PPD and our belief in the size of the potential market opportunity in PPD and the role of ZURZUVAE in unlocking such potential; our clinical development plans and expectations, including expected timelines for data read-outs and other activities and our expectations as to potential results and next steps, if any, based on such results; our plans for evaluating additional indications for our product candidates; our belief in the potential profile. benefit and potential of our product candidates; our estimates as to the number of patients with disorders and diseases of interest to us and that we hope to help; the potential drivers of value for our business; the opportunity, mission, goals and vision for our business; and our expectations with respect to cash runway, expenses and maintaining a strong financial foundation.
- These forward-looking statements are neither promises nor guarantees of future performance, and are subject to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those contemplated in these forward-looking statements, including the risk that:
  - We may not be successful in our commercialization efforts with respect to ZURZUVAE in the treatment of women with PPD; the market size and market acceptance for ZURZUVAE as a treatment for women with PPD by healthcare professionals, patients and payors may be significantly smaller than we expect; we may encounter reimbursement, market access, process-related or other issues in the course of our commercialization activities; early positive signs may not be a signal of future success; ZURZUVAE may not achieve the clinical benefit in the treatment of women with PPD that we expect; we may not generate revenue from sales of ZURZUVAE at the levels or on the timing we expect.
  - Our clinical trials may not meet their primary endpoints or key secondary endpoints. For example, results of our ongoing clinical studies of dalzanemdor in HD and AD may be negative like the results from the PRECEDENT Study even with adjustments we make in the endpoint in our HD study. The possible distinctions among indications as a result of the underlying pathophysiology and symptomatology in PD may not prove to be relevant in the context of clinical trials of dalzanemdor. Success in nonclinical studies or in prior clinical trials of our product candidates may not be repeated or observed in ongoing, planned or future studies involving the same compound or other product candidates. Non-clinical and clinical results from ongoing or future trials may not support further development of the product candidate, our planned regulatory pathway, or filing for or obtaining regulatory approval on the timelines we expect or at all and we may be required to conduct additional clinical trials or nonclinical studies which may not be feasible or successful. We may experience slower than expected enrollment in our future clinical trials or may encounter delays or problems with ongoing or future clinical trials, including in analyzing data or requiring the need for additional analysis, data or patients, or due to timing and results of consultation with regulatory authorities, and such issues with any trial could cause delay in completion of the trial, availability of results and timing or success of future activities.
  - We may encounter unexpected safety or tolerability issues with respect to any of our product candidates or marketed products; we may encounter different or more severe adverse events at higher doses, different frequency or length of dosing or in new indications.
  - At any stage, regulatory authorities may ask for additional clinical trials, nonclinical studies or other data in order for us to proceed further in development or to file for or obtain regulatory approval. Other decisions or actions of the FDA or other regulatory authorities may affect the initiation, timing, design, size, progress and cost of clinical trials or development efforts and our ability to proceed with further development.
  - Even if our other product candidates are successfully developed and approved, the number of patients with the diseases or disorders our products treat or the subset of such patients we believe will use our products, the need for new treatment options, and the actual market for such products may be smaller than our current estimates.
  - The anticipated benefits of our collaborations, including our collaboration with Biogen, may never be achieved. The need to align with our collaborators may hamper or delay our development and commercialization efforts or increase our costs; our business may be adversely affected and our costs may increase if any of our key collaborators fails to perform its obligations or terminates our collaboration.
  - We may not be able to obtain and maintain adequate intellectual property protection or other forms of data and marketing exclusivity for our products, or to defend our patent portfolio against challenges from third parties.
  - We may face competition from others developing products or with approved products for similar uses as those for which our product candidates are being developed.
  - Our operating expenses may be higher than forecasted and we may face unexpected expenses which could cause us to use our cash faster or change our plans or both. Our revenues may be lower than we expect, including if we do not achieve market acceptance of ZURZUVAE in the treatment of women with PPD or if we do not achieve our access/reimbursement goals in this indication, or if our launch for other reasons is not as successful as we expect which may cause us to not achieve our cash runway expectations. We may not achieve expected milestones that trigger cash payments on the timing we expect, or at all. For these and other reasons, our expectations with respect to cash, expenses and financial strength may not prove to be accurate. Additional funding may not be available on acceptable terms, or at all.
  - We may not be able to establish and maintain key business relationships with third parties on acceptable terms or we may encounter problems with the performance of such third parties.
  - We may encounter technical and other unexpected hurdles in the manufacture, development or commercialization of our products.
  - Any of the foregoing or other factors may negatively impact our ability to achieve our goals, mission, vision, opportunities, plans or expectations for our business and the potential for value creation.
- For additional disclosure regarding these and other risks Sage faces, see the disclosure contained in the "Risk Factors" section of our most recent report, and in our other public filings, with the Securities and Exchange Commission, available on the SEC's website at http://www.sec.gov. Any forward-looking statement represent our views only as of today, and should not be relied upon as representing our views as of any subsequent date. We undertake no obligation to update or revise the information contained in this presentation, whether as a result of new information, future events or circumstances or otherwise.

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Sage Therapeutics call participants

Barry Greene

Chief Executive Officer

Chris Benecchi

Chief Business Officer

Laura Gault

Chief Medical Officer

Kimi Iguchi

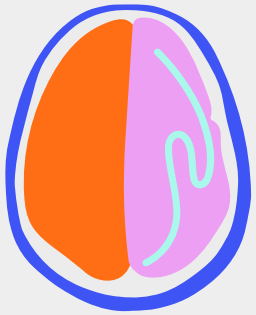
Chief Financial Officer

Mike Quirk

Chief Scientific Officer

Patient inspired, patient led, *patient first*

ZURZUVAE®
First and only oral product approved by the FDA specifically for postpartum depression *(second approved product)*



Differentiated pipeline driven by patient need, science, and external insights

Scientific and therapeutic leadership within GABA and NMDA opportunities – strong product engine

Strong financial foundation to help create value for sustained growth

Values-driven culture focused on doing what's right for patients

Strong ZURZUVAE performance in the second quarter

Strong demand with **~2,000 prescriptions** in Q2;
>60% increase from Q1 to Q2

More than 1,400 shipments delivered to patients;
>95% increase in shipments from Q1 to Q2

Total revenue of $14.8M; 19% increase
from Q1 to Q2

Continued HCP prescriber momentum with
>70% of prescriptions written by OBGYNs in Q2

~80% of commercial lives covered by payor policies as of late July, with the majority having no step therapy or complex prior authorizations

Please refer to the U.S. Prescribing Information for ZURZUVAE (https://documents.sage-biogen.com/us/zurzuvae/pi.pdf)

COMPOUND	TARGET INDICATIONS	PHASE 1	PHASE 2	PHASE 3	STATUS
Postpartum Depression Commercial Products					
ZURZUVAE®* (zuranolone) CIV	Postpartum Depression				MARKETED
ZULRESSO® (brexanolone) CIV injection	Postpartum Depression				MARKETED
Pipeline					
Zuranolone* (SAGE-217)	Major Depressive Disorder**			PHASE 3	
Dalzanemdor (SAGE-718)	Huntington's Disease Cognitive Impairment		IN PHASE 2		
	Alzheimer's Disease Mild Cognitive Impairment and Mild Dementia		IN PHASE 2		
Programs In Evaluation					

SAGE-324***
GABA Hypofunction

SAGE-689
Acute GABA Hypofunction

SAGE-421
NMDA Hypofunction

SAGE-319
GABA Hypofunction

**Collaboration Partners: Biogen Inc. and Shionogi for zuranolone*
***The FDA issued a CRL on August 4, 2023, related to the NDA for the treatment of adults with MDD stating that the application did not provide substantial evidence of effectiveness to support the approval of zuranolone for the treatment of MDD and that an additional study or studies will be needed. No Phase 3 trials are currently ongoing.*
****On July 24, 2024, Sage and Biogen announced discontinuation of clinical development of SAGE-324 in ET. The companies are evaluating next steps, if any, for other potential indications.*

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Please refer to the U.S. Prescribing Information for ZULRESSO and the U.S. Prescribing Information for ZURZUVAE
Safety and efficacy for investigational uses or compounds have not been established. There is no guarantee that the outcome of these studies will be positive or result in approval by a health authority.

ZURZUVAE Q2 2024 PPD Launch Update

ZURZUVAE™
(zuranolone) capsules CIV
20 mg • 25 mg • 30 mg

PRESCRIPTION DATA*

- ~2,000 prescriptions of ZURZUVAE written in Q2
- More than 1,400 prescriptions shipped/delivered in Q2

PHYSICIAN TRENDS*

- OBGYNs accounted for over 70% of prescriptions, followed by psychiatrists and PCPs
- New and repeat ZURZUVAE prescribers grew during the second quarter
- HCPs reached through omnichannel efforts (personal and/or digital promotion)

COVERAGE UPDATES*

- ~80% of all commercial lives covered
- 2 of 3 national PBMs with coverage policies in place
- Majority of Medicaid coverage decisions already made, with several of the largest states completing reviews during Q2

Data as of Q2 2024

Phase 2 data expected for dalzanemdor (SAGE-718) in HD and AD in late 2024

MID 2024 (Q2/Q3)

- Topline data from the **SURVEYOR Study in HD**

LATE 2024 (Q3/Q4)

- Topline data from the **LIGHTWAVE Study in AD**
- Topline data from the **DIMENSION Study in HD**

HD = Huntington's Disease, AD = Alzheimer's Disease

KINETIC 2 Data Summary

The Phase 2 KINETIC 2 Study was a double-blind, randomized, placebo-controlled, dose-response study to evaluate efficacy, safety, and tolerability of SAGE-324 (BIIB124) 15 mg, 30 mg, and 60 mg (with uptitration) in participants with ET (N = 147 [monotherapy cohort, n = 129]).

Efficacy

(monotherapy cohorts only)

- Sage-324 (BIIB124) did not demonstrate a statistically significant dose-response relationship in change from baseline to Day 91 based on the primary endpoint, the TETRAS PS Item 4 (upper limb) Total Score, in participants with ET.
- No statistically significant differences were demonstrated for any dose of SAGE-324 versus placebo in the change from baseline to Day 91 on the TETRAS PS Item 4 Total Score or the TETRAS ADL Composite Score.

Safety & Tolerability

(monotherapy and adjunct therapy cohorts combined)

- The most common TEAEs in any treatment group were somnolence, dizziness, fatigue, feeling abnormal, headache, and balance disorder.
- The majority of TEAEs in any treatment group were mild or moderate in intensity.
- There was a dose-relationship observed in the incidence of CNS depressant TEAEs and in the frequency of TEAEs leading to study drug discontinuation.

The ET program will discontinue – Sage and Biogen are evaluating other potential indications

TETRAS = The Essential Tremor Rating Assessment Scale, PS = Performance Subscale, ADL = Activities of Daily Living, TEAEs = Treatment emergent adverse events

Other potential areas of growth within GABA and NMDA platforms

Profile of SAGE-319

GABA Receptor PAM

- Extra-synaptic $GABA_A$ receptor preferring positive allosteric modulator
- Profile intended to support daily, oral, chronic dosing
- Differentiated clinical EEG signature compared to zuranolone and SAGE-324

Potential indications:

NEURODEVELOPMENTAL / MOTOR DISORDERS

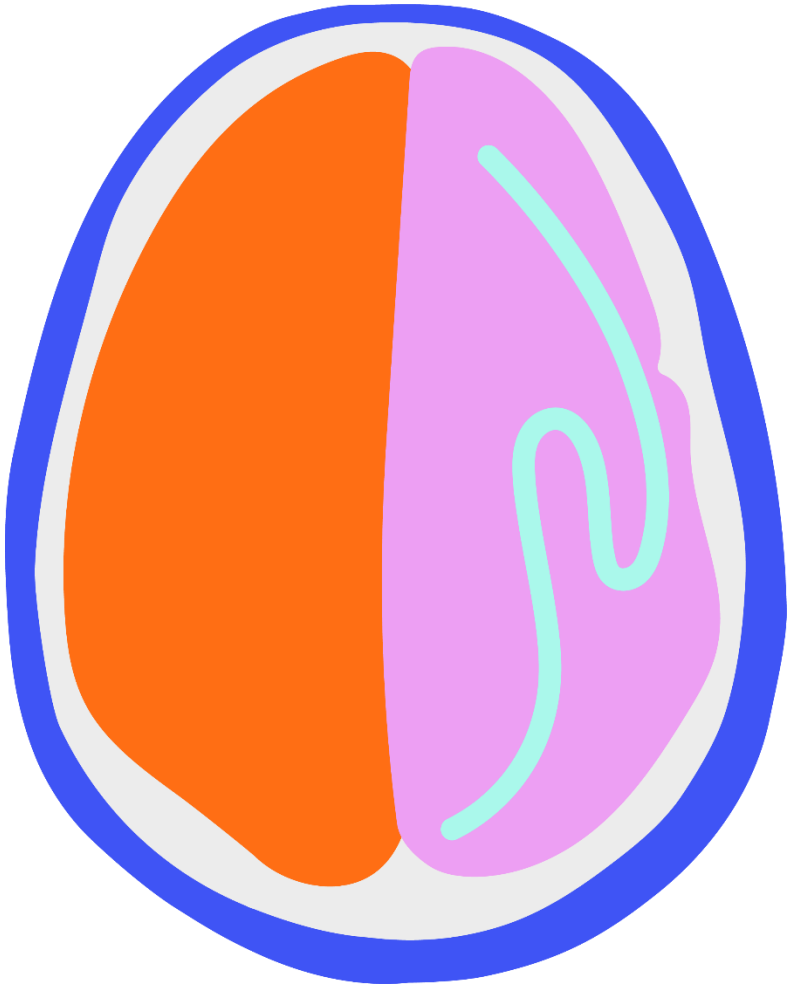
Preclinical profile of SAGE-421

NMDA Receptor PAM

- NMDA receptor positive allosteric modulator
- Profile intended to support daily, oral, chronic dosing

Potential indications:

COGNITIVE IMPAIRMENT, SCHIZOPHRENIA



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Second Quarter 2024 Financial Results

Strong financial foundation with $0.6B in cash at the end of Q2 '24

Item	Q2 '24	Q2 '23
Product revenue, net Zulresso	$0.6M	$2.5M
License and milestone revenue - related party	$0M	$0M
Collaboration revenue - related party ZURZUVAE	$7.4M	$0M
Other Collaboration revenue	$0.6M	$0M
Total Revenue	*$8.7M*	*$2.5M*
Cost of Revenues	$1.4M	$0.2M
R&D Expense	$62.6M	$97.2M
SG&A Expense	$56.0M	$75.6M
Restructuring	$0M	$0M
Total Operating Costs and Expenses	$120.0M	$172.9M
Net Loss	($102.9M)	($160.3M)
Cash and Marketable Securities	$0.6B	$1.0B

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Potential Value Creating Catalysts

Anticipated Events		
ZURZUVAE*	Ongoing commercialization of ZURZUVAE in the treatment of women with PPD	2024
	Present analyses of real-world evidence for ZURZUVAE including health economics and patient reported outcomes	2024
Dalzanemdor (SAGE-718)	*Topline data from the PRECEDENT Study in PD*	EARLY 2024 – COMPLETED
	Topline data from the SURVEYOR Study in HD	MID 2024 – COMPLETED
	Topline data from the LIGHTWAVE Study in AD	LATE 2024
	Topline data from the DIMENSION Study in HD	LATE 2024
	Present additional analyses of data from clinical development program as well as disease state and burden of disease research in HD and/or AD	2024
SAGE-324*	*Topline data from Phase 2 KINETIC 2 Study in ET*	MID 2024 - COMPLETED
Additional Expected Milestones		
Cash Balance	Maintain strong financial foundation	2024

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PPD = postpartum depression, ET = essential tremor, HD = Huntington's disease, PD = Parkinson's disease, AD = Alzheimer's disease

**Collaboration Partners: Biogen Inc. and Shionogi for ZURZUVAE (zuranolone) and Biogen Inc. for SAGE-324*

Q&A