



Oral Simufilam Slowed Cognitive Decline in a Randomized Withdrawal Trial of Mild-to-Moderate Alzheimer’s Disease

July 5, 2023

- **Simufilam Slowed Cognitive Decline by 38% Versus Placebo Over 6 months in Patients with Mild-to-Moderate Alzheimer’s Disease.**
- **Drug Effects Favored Mild Alzheimer’s Disease.**
- **In Mild Alzheimer’s, Simufilam Improved Cognition Scores Over 6 Months.**
- **In Mild Alzheimer’s, Simufilam Stabilized Cognition Scores Over 18 Months.**
- **Oral Simufilam Continues to be Safe, Well Tolerated.**

AUSTIN, Texas, July 05, 2023 (GLOBE NEWSWIRE) -- Cassava Sciences, Inc. (Nasdaq: SAVA), a biotechnology company, today announced top-line clinical results from its Cognition Maintenance Study (CMS). The CMS is a small proof-of-concept study designed to demonstrate the effects of drug versus placebo in a randomized withdrawal trial design. The study enrolled 157 patients with mild-to-moderate Alzheimer’s disease, a more advanced and difficult-to-treat stage of disease.

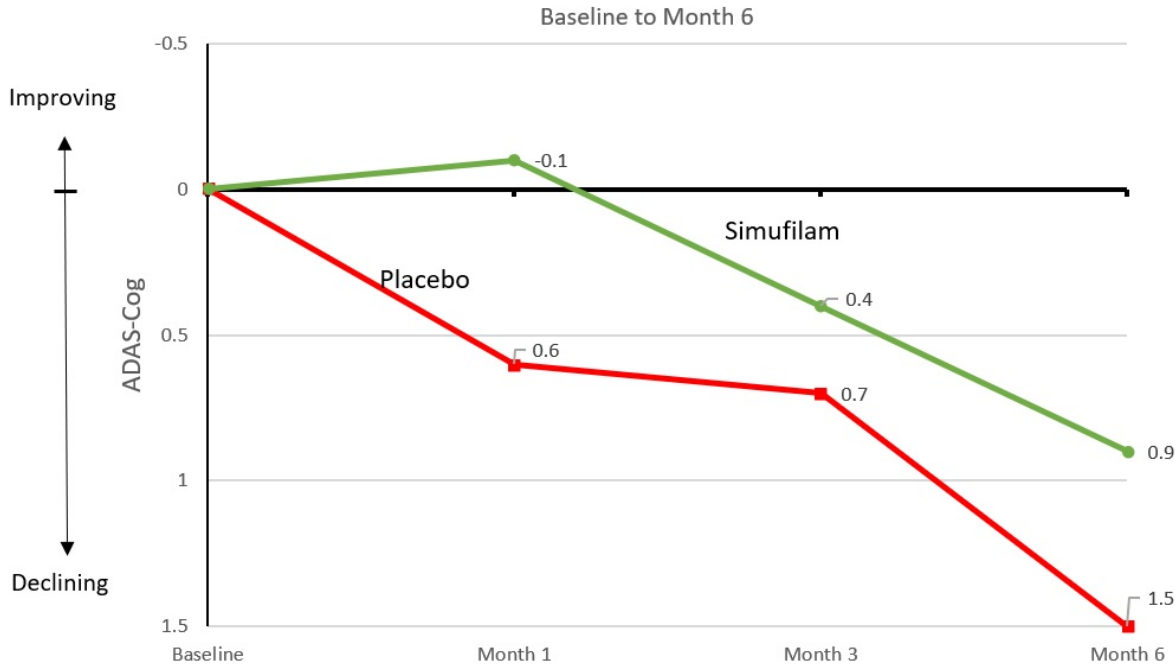
In this double-blind, placebo-controlled, randomized study, all patients first received open-label simufilam 100 mg for 12 months; patients were then randomized (1:1) to receive either simufilam 100 mg or placebo for 6 months. 16 U.S. clinical sites participated. The CMS had one pre-specified cognitive endpoint: mean change in ADAS-Cog11 scores over 6 months, drug versus placebo.

Simufilam treatment for 6 months slowed cognitive decline by 38% compared to placebo in mild-to-moderate Alzheimer’s disease (MMSE 16-26). The placebo arm declined 1.5 points on ADAS-Cog, and this arm declined at all measured timepoints. The simufilam arm declined 0.9 points on ADAS-Cog, a 38% difference in favor of drug at month 6 (95% CI, – 2.1 to 1.0; not significant for sample sizes). See Table 1 and Chart 1.

Table 1: Results of Randomized Withdrawal Study – cognitive change, full analysis set (FAS)

<i>Full Analysis Set</i>	Simufilam 100 mg (N = 78)	Placebo (N = 77)	Numerical Difference	Percent Difference
6-month Change in ADAS-Cog	0.9 point Decline	1.5 point Decline	– 0.6	38% in favor of drug

CHART 1 - Decline in Cognition Scores, FAS



Upon randomization into the CMS, mean baseline MMSE scores were 18.6 and 18.1 for the simufilam and placebo arms, respectively. Mean baseline ADAS-Cog scores were 19.3 and 21.9 for the simufilam and placebo arms, respectively.

“Monoclonal antibody drugs have slowed cognitive decline by 35% or less in early Alzheimer’s patients in large Phase 3 trials over 18 months,” said James Kupiec, MD, Chief Medical Officer. “In this context, we believe results of our 6-month study are encouraging, despite vast differences in patient selection and the design and results of our randomized withdrawal study compared to large Phase 3 trials.”

Simufilam Drug Effects Favored Patients with Mild Alzheimer’s Disease.

Simufilam treatment for 6 months slowed cognitive decline > 200% compared to placebo in mild Alzheimer’s disease. CMS patients with mild Alzheimer’s (MMSE 21-26) on placebo declined 0.6 points on ADAS-Cog over 6 months as a group. CMS patients with mild Alzheimer’s on simufilam improved 0.6 points over 6 months as a group, a 205% difference in favor of drug (95% CI, – 2.6 to 0.4; not significant for sample sizes). See Table 2 and Chart 2.

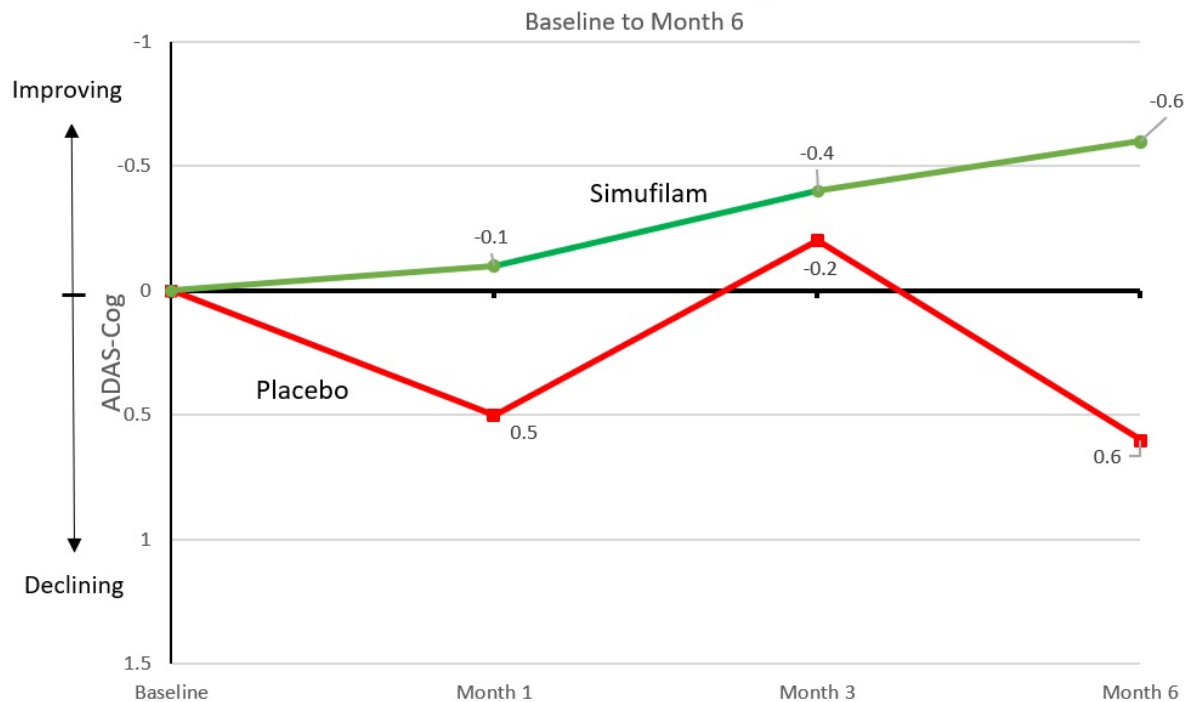
Table 2: Results of Randomized Withdrawal Study – cognitive change, mild patients

Mild Patients	Simufilam 100 mg (N= 40)	Placebo (N= 36)	Numerical Difference	Percent Difference
6-month Change in ADAS-Cog	0.6 point Improvement	0.6 point Decline	– 1.1	205% in favor of drug

“Patients started out taking open-label simufilam for 12 months prior to enrolling in the CMS,” said Remi Barbier, President & CEO. “CMS patients on placebo were, in effect, withdrawn from simufilam for 6 months. This placebo arm declined while the CMS arm randomized to simufilam improved. We believe the emerging separation of cognitive scores between these two arms represents a drug effect.”

Suzanne Hendrix, PhD, CEO of Pentara Corporation, added: “Results for simufilam continue to be noteworthy. The lack of disease progression in cognition, as measured by the ADAS-Cog over 18 months of treatment in mild patients, is well outside the range in historic placebo decline rates from numerous other studies. The placebo group in the CMS has started to decline again but continues to maintain benefit over historical placebo groups.”

CHART 2 - Decline in Cognition Scores, patients with mild Alzheimer's



Upon randomization into the CMS, mean baseline MMSE scores for *mild* patients were MMSE 24.0 and MMSE 24.1 for the simufilam and placebo arms, respectively. Mean baseline ADAS-Cog scores for *mild* patients were 11.0 and 11.2 for the simufilam and placebo arms, respectively.

Simufilam for 18 months stabilized cognition in *mild* Alzheimer's disease.

After taking open-label simufilam for 12 months, 76 patients with *mild* Alzheimer's disease (MMSE 21-26) enrolled in the CMS and were randomized to receive either simufilam (N=40) or placebo (N=36) for 6 months. Mild patients randomized to simufilam in the CMS showed no material decline in ADAS-Cog scores over 18 months as a group, indicating stable cognition. Mild patients randomized to placebo in the CMS (and therefore withdrawn from simufilam treatment for 6 months) declined by 0.8 points in ADAS-Cog as a group. See Figure 1.

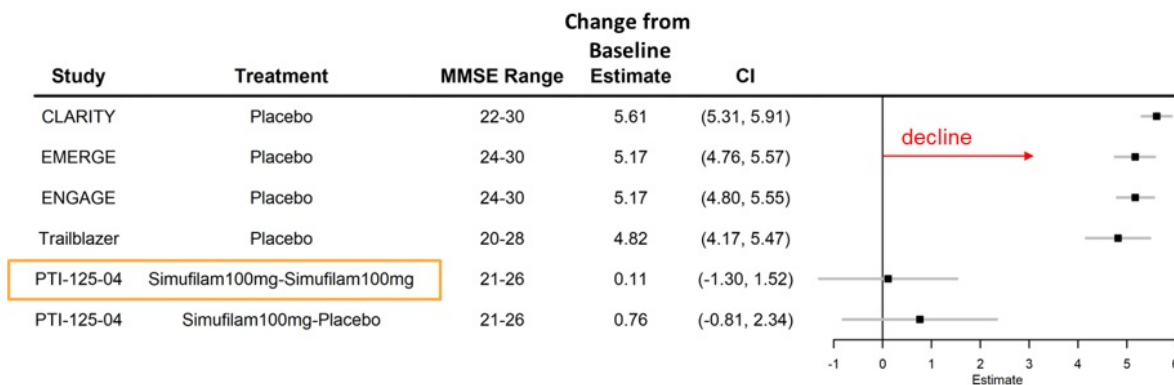


Figure 1. Historical declines on ADAS-Cog over 18 months in Alzheimer's disease (MMSE 20-30), placebo arms vs simufilam treatment.¹ Notes: results shown for CLARITY P3 trial of lecanemab; EMERGE and ENGAGE P3 studies of aducanumab; and TRAILBLAZER P3 trial of donanemab; in this figure, the CMS is referred to as the 'PTI-125-04' study; 'Simufilam100mg-Simufilam100mg' refers to patients who received simufilam in both the open-label phase and the CMS; 'Simufilam100mg-Placebo' refers to patients who received simufilam in the open-label phase and placebo in the CMS.

Safety Data

Simufilam 100 mg twice daily was safe and well tolerated in this study. There were no drug-related serious adverse events. No treatment-emergent adverse events (TEAEs) occurred in 5% or more of study participants in the CMS.

Discussion

The CMS was a randomized withdrawal study. Patients who completed 12 months of open-label simufilam treatment were all invited to participate in the CMS. It is not known how long a washout period may be needed to remove lingering drug effects, if any, from prior treatment with open-label simufilam for 12 months.

In this small study of oral simufilam in patients with mild-to-moderate Alzheimer's disease, the pre-specified cognitive endpoint showed a 38% decline

in ADAS-Cog over six months in favor of simufilam, with good drug safety. Effects were pronounced in mild patients. Mean baseline MMSE and ADAS-Cog scores were approximately balanced given the small size of each arm.

Analysis of Efficacy Endpoints

The pre-specified cognition endpoints were analyzed by Pentara Corporation, an independent consulting firm that specializes in complex statistical analysis of clinical trial results. Suzanne Hendrix, PhD, CEO of Pentara, has over 150 peer-reviewed publications of clinical trial results and statistical approaches for clinical trials, many focusing on statistical methodology for Alzheimer's disease.

Chain of Custody for Clinical Data

Investigator sites collected clinical data from study participants. Sites entered their clinical data directly into an electronic data capture system managed by an independent, outside data management vendor. The data management vendor also maintains the clinical database. The data management vendor transmitted the clinical database directly to Pentara Corporation for analysis.

Study Limitations

The CMS is a proof-of-concept study involving a small number of patients and limited data. Top-line clinical CMS results do not constitute, and should not be interpreted as, regulatory evidence of safety or efficacy for simufilam in Alzheimer's disease. Rigorous evidence for drug safety and efficacy is derived from one or more large, randomized placebo-controlled Phase 3 studies. The limited size of the CMS may introduce clinical or statistical bias or may generate results that may not fully distinguish between drug effects and random variation. Different methods of statistical analysis on clinical data from the same study may lead to objectively different numerical results. These and other statistical and clinical features of our CMS study add complexity or limitations to the scope of data interpretation. In addition, 'Top-line data' is a summary of the clinical data prior to the completion of a full and final audit or quality-control of the clinical database. We are communicating top-line data so that stakeholders may have timely access to a summary of the CMS findings prior to us receiving the final dataset. Final data may change from today's top-line data.

On-going Phase 3 Studies with Simufilam

Cassava Sciences is currently evaluating simufilam tablets for Alzheimer's disease dementia in two Phase 3 clinical studies. These are large, randomized, double-blind, placebo-controlled trials. The Phase 3 program is recruiting a total of approximately 1,750 patients with mild-to-moderate Alzheimer's disease who also meet other study eligibility criteria. Both Phase 3 studies have received a Special Protocol Assessment (SPA) from the U.S. Food and Drug Administration. The Phase 3 studies are actively recruiting Alzheimer's patients in over 100 clinical sites in the United States, Canada, Puerto Rico, South Korea and Australia.

Patient enrollment is expected to be completed for both Phase 3 studies by yearend 2023.

About Simufilam

Simufilam is Cassava Sciences' proprietary, small molecule (oral) drug candidate that restores the normal shape and function of altered filamin A (FLNA) protein in the brain. Cassava Sciences owns worldwide development and commercial rights to its research programs in Alzheimer's disease, and related technologies, without royalty obligations to any third party.

About Cassava Sciences, Inc.

Cassava Sciences is a clinical-stage biotechnology company based in Austin, Texas. Our mission is to detect and treat neurodegenerative diseases, such as Alzheimer's disease. Our novel science is based on stabilizing—but not removing—a critical protein in the brain. Our product candidates have not been approved by any regulatory authority, and their safety, efficacy or other desirable attributes have not been established.

For more information, please visit: <https://www.CassavaSciences.com>

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Cautionary Note Regarding Forward-Looking Statements:

This news release contains forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, relating to: the design, scope, conduct or intended purpose of our randomized withdrawal study or Phase 3 program of simufilam in patients with Alzheimer's disease; the ability of simufilam to provide patients with drug effects; the apparent ability of simufilam to favor patients with mild Alzheimer's disease; the safety or tolerance of simufilam in the CMS clinical trial; our current expectations regarding timing of and the target patient enrollment numbers for our Phase 3 studies; any expected clinical results of Phase 3 studies; the treatment of people with Alzheimer's disease dementia; the safety or efficacy of simufilam in people with Alzheimer's disease dementia; comments made by our employees regarding simufilam, drug effect, and the treatment of Alzheimer's disease; and potential benefits, if any, of our product candidates. These statements may be identified by words such as "may," "anticipate," "believe," "could," "expect," "would", "forecast," "intend," "plan," "possible," "potential," and other words and terms of similar meaning.

Simufilam is our investigational product candidate. It is not approved by any regulatory authority in any jurisdiction and its safety, efficacy or other desirable attributes have not been established in patients.

Drug development involves a high degree of risk, and only a small number of research and development programs result in regulatory approval and commercialization of a product. Clinical results from our prior studies may not be indicative of results of future or larger scale clinical trials and do not ensure regulatory approval. You should not place undue reliance on these statements or any scientific data we present or publish.

Such statements are based largely on our current expectations and projections about future events. Such statements speak only as of the date of this news release and are subject to a number of risks, uncertainties and assumptions, including, but not limited to, those risks relating to the ability to conduct or complete clinical studies on expected timelines, to demonstrate the specificity, safety, efficacy or potential health benefits of our product candidates, any unanticipated impacts of inflation on our business operations, and including those described in the section entitled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022, and future reports to be filed with the SEC. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from expectations in any forward-looking statement. In light of these risks, uncertainties and assumptions, the forward-looking statements and events discussed in this news release are inherently uncertain and may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not

rely upon forward-looking statements as predictions of future events. Except as required by law, we disclaim any intention or responsibility for updating or revising any forward-looking statements contained in this news release. For further information regarding these and other risks related to our business, investors should consult our filings with the SEC, which are available on the SEC's website at www.sec.gov.

This news release may also contain statistical data and drug information based on independent industry publications or other publicly available information. We have not independently verified the accuracy or completeness of the data contained in these publicly available sources of data and information. Accordingly, we make no representations as to the accuracy or completeness of such data or information. You are cautioned not to give undue weight to such data.

The content of this presentation is solely our responsibility and does not represent the official views of the National Institutes of Health or any other government agency.

¹ Figure 1: Forest plot by Pentara Corporation. Data was sourced from the placebo groups in randomized, controlled trials of monoclonal antibodies conducted by other sponsors in Alzheimer's disease (MMSE 20-30).

Photos accompanying this announcement are available at

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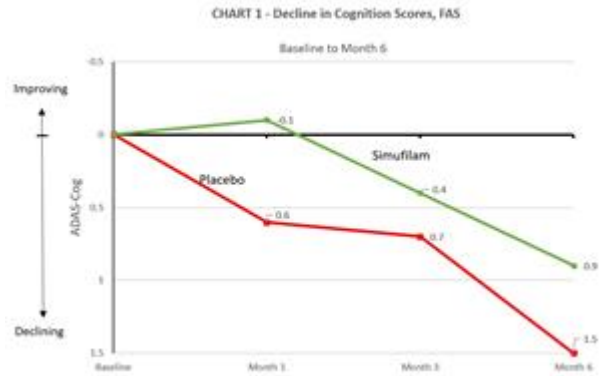
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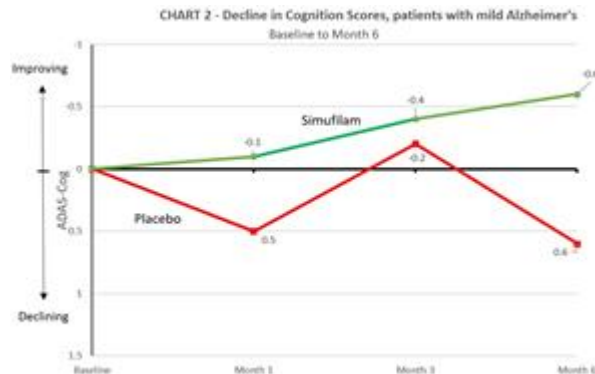
Source: Cassava Sciences, Inc.

CHART 1



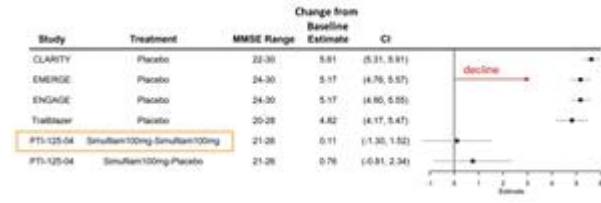
Decline in Cognition Scores, FAS

CHART 2



Decline in Cognition Scores, patients with mild Alzheimer's

Figure 1



Historical declines on ADAS-Cog over 18 months in Alzheimer's disease (MMSE 20-30), placebo arms vs simufilam treatment.