



Alzheon to Present Biomarker, Brain Preservation and Clinical Effects of Oral Tablet ALZ-801 (Valiltramiprosate) at Upcoming AD/PD 2023 Conference in Gothenburg, Sweden

Industry-Leading Results Position ALZ-801 to Potentially Become the First Oral Agent that Can Slow or Even Stop and Prevent Alzheimer's Pathology in Patients and Healthy Individuals at Risk for the Disease

Robust Disease-Modifying Effects Observed Through 52 Weeks of Treatment with ALZ-801 Tablet in APOE4 Carriers with Early Alzheimer's Disease

New Data Further Validate Alzheon Science and Unique Mechanism of Action of Oral ALZ-801 as Potentially First and Only Amyloid Oligomer Prevention Therapy

Advances in Development of Proprietary Assay for Detection of A β (1-42) Oligomers Aligns Novel Diagnostic with ALZ-801 Commercial Launch in 2025

Safety Profile in ALZ-801 Studies Remains Favorable & Consistent with Prior Data in Over 2,800 Alzheimer's Patients, with no Increased Risk of Vasogenic Brain Edema

FRAMINGHAM, Mass., March 22, 2023 — [Alzheon, Inc.](#), a clinical-stage biopharmaceutical company developing a broad portfolio of product candidates and diagnostic assays for patients suffering from Alzheimer's disease (AD) and other neurodegenerative disorders, today announced that it will be presenting interim findings from an ongoing Phase 2 study evaluating ALZ-801 tablet at the upcoming [AD/PD 2023 Conference](#) to be held from March 28 – April 1, 2023 in Gothenburg, Sweden.

[ALZ-801 \(valiltramiprosate\)](#) is an oral agent in [Phase 3 development](#) as a potentially disease modifying treatment for AD that blocks formation of neurotoxic soluble beta amyloid (A β) oligomers causing cognitive decline in Alzheimer's patients. In mechanism of action studies, ALZ-801 fully inhibited the formation of amyloid oligomers at the Phase 3 clinical dose. ALZ-801 has

shown potential for robust efficacy in the highest-risk Alzheimer's population – patients with two copies of the apolipoprotein ε4 allele (APOE4/4 homozygotes), and favorable safety with no increased risk of brain vasogenic edema, seen in trials with plaque-clearing antibodies. This population is the focus of Alzheon's pivotal [Phase 3 APOLLOE4 trial](#) and has the highest likelihood of demonstrating successful efficacy outcomes.

Alzheon Chief Scientific Officer, John Hey, PhD, will give a podium presentation titled: *Significant Biomarker Effects of Oral Anti-Amyloid Agent ALZ-801 (Valiltramiprosate) In Phase 2 Study In APOE4 Carriers With Early Alzheimer's Disease*, on March 30, 2023, at 6:50 p.m. CET or 12:50 p.m. EST, as part of the "AD Drug Development Clinical Trials" symposium in Hall C.

The open-label Phase 2 trial enrolled subjects at seven sites in the Czech Republic and Netherlands. Study is evaluating effects on plasma biomarkers of AD, hippocampal volume (HV), and clinical outcomes of ALZ-801 265mg BID tablet in Early AD subjects (MMSE 22-30) with APOE4/4 or APOE3/4 genotype.

A total of 84 APOE4 carriers were enrolled and received ALZ-801, with 80 and 75 subjects completing 26 and 52 weeks, respectively. Plasma p-tau₁₈₁ change from baseline was significant at 13 and 26 weeks and reached -41% at 52 weeks (p=0.016). Bilateral hippocampal volume atrophy at 1 year was reduced by approximately 20% compared to the matched subjects from AD Neuroimaging Initiative. Most common adverse events were mild nausea and COVID infection, with no drug-related serious events and no events of ARIA-E.

"The results of this study further confirm both the role of beta amyloid oligomers in the pathobiology of Alzheimer's disease and the mechanism of action of ALZ-801. By inhibiting the misfolding of amyloid monomers and subsequent formation of neurotoxic amyloid oligomers, we observed a rapid and sustained reduction in plasma p-tau₁₈₁ as early as 13 weeks, with continued reduction through 52 weeks," said Dr. Hey. "Preventing oligomer formation with an oral tablet is a simplified approach to disease modification in Alzheimer's. Phase 2 study results provide compelling evidence for potential efficacy of ALZ-801 in APOE4 carriers with Alzheimer's disease, who represent two thirds of Alzheimer's patients. These data also highlight the potential safety and efficacy advantages of ALZ-801 compared to plaque-clearing antibodies, while offering a simplified patient journey towards an effective treatment."

Additionally, poster P0457/#2737, titled: *Utilization of Cyclic Ion Mobility Spectrometry for Detection and Characterization of Aβ(1-42) Oligomers*, highlights progress by the Institute of Organic Chemistry and Biochemistry (IOCB) in collaboration with Alzheon to detect and measure the individual species of beta amyloid oligomers in human CSF. Mikuláš Vlk of IOCB will present the poster, with Dr. Hey and other Alzheon scientists among contributing authors.

"Alzheon has pioneered precision medicine in Alzheimer's disease by targeting neurotoxic amyloid oligomers, and these promising biomarker, imaging, and clinical data with ALZ-801 provide additional support for our approach. It is becoming apparent that our best opportunity to alter the relentless progression of Alzheimer's pathology is to identify individuals early in the

disease course, ideally before clinical symptoms emerge. Our ability to find these patients is enabled by biomarkers and imaging, and novel detection of neurotoxic oligomers in the initial stages of the amyloid cascade offers potential points of intervention,” said Martin Tolar, MD, PhD, Founder, President, and CEO of Alzheon. “We are potentially two years from a commercial launch of ALZ-801 in the U.S. and the successful collaboration with IOCB means that we are getting closer to a diagnostic, which would complement our novel therapy, extend the therapeutic window in Alzheimer’s, and further differentiate our treatment approach to this devastating disease.”

About ALZ-801

[ALZ-801 \(valiltramiprosate\)](#) is an investigational oral agent in [Phase 3 development](#) as a potentially disease modifying treatment for AD.^{1,3} In mechanism of action studies, ALZ-801 has been shown to fully inhibit the formation of neurotoxic soluble beta amyloid oligomers at the Phase 3 clinical dose.^{5,6} ALZ-801 acts through a novel [enveloping molecular mechanism of action](#) to fully block formation of neurotoxic soluble amyloid oligomers in the human brain⁷ associated with the onset of cognitive symptoms and progression of AD.¹⁻⁴ ALZ-801 received Fast Track designation from the U.S. Food and Drug Administration in 2017. The clinical data for ALZ-801 and Alzheon’s safety database indicate a favorable safety profile.^{5-7,9} The initial [Phase 3 program for ALZ-801](#) is focusing on Early AD patients with the APOE4/4 genotype, with future expansion to AD treatment and prevention in patients carrying one copy of the APOE4 gene and noncarriers.¹⁻⁴

ALZ-801 APOLLOE4 Phase 3 Study

An Efficacy and Safety Study of ALZ-801 in APOE4/4 Early Alzheimer's Disease Subjects ([NCT04770220](#)): This ongoing study is designed to evaluate the efficacy, safety, biomarker and imaging effects of 265 mg twice daily oral dose of ALZ-801 in Early AD subjects with the APOE4/4 genotype, who constitute approximately 15% of Alzheimer's patients. This is a double-blind, randomized trial comparing oral ALZ-801 to placebo treatment over 78 weeks. The APOLLOE4 trial is supported by a \$47 million [grant from the National Institute on Aging](#).

ALZ-801 Phase 2 Biomarker Study

Biomarker Effects of ALZ-801 in APOE4 Carriers With Early Alzheimer's Disease ([NCT04693520](#)): This ongoing study is designed to evaluate the effects of 265 mg twice daily oral dose of ALZ-801 on biomarkers of AD pathology in subjects with Early AD, who have either the APOE4/4 or APOE3/4 genotype and constitute 65-70% of Alzheimer's patients. The study also includes evaluation of clinical efficacy, safety, tolerability, and pharmacokinetic profile of ALZ-801 over 104 weeks of treatment.

About Alzheon

[Alzheon, Inc.](#) is a clinical-stage biopharmaceutical company developing a broad portfolio of product candidates and diagnostic assays for patients suffering from Alzheimer’s disease and other neurodegenerative disorders. We are committed to developing innovative medicines by directly addressing the underlying pathology of neurodegeneration. Our lead Alzheimer’s clinical candidate, [ALZ-801 \(valiltramiprosate\)](#), is an oral agent in [Phase 3 development](#) as a potentially

disease modifying treatment for AD. ALZ-801 is an oral small molecule that fully blocks formation of neurotoxic soluble amyloid oligomers in the brain. Our clinical expertise and technology platform are focused on developing drug candidates and diagnostic assays using a [precision medicine approach](#) based on individual genetic and biomarker information to advance therapies with the greatest impact for patients.

Alzheon Scientific Publications

- ¹Tolar M, et al: [Neurotoxic Soluble Amyloid Oligomers Drive Alzheimer's Pathogenesis and Represent a Clinically Validated Target for Slowing Disease Progression](#), *International Journal of Molecular Sciences*, 2021; 22, 6355.
- ²Abushakra S, et al: [APOE ε4/ε4 Homozygotes with Early Alzheimer's Disease Show Accelerated Hippocampal Atrophy and Cortical Thinning that Correlates with Cognitive Decline](#), *Alzheimer's & Dementia*, 2020; 6: e12117.
- ³Tolar M, et al: [Aducanumab, Gantenerumab, BAN2401, and ALZ-801—the First Wave of Amyloid-Targeting Drugs for Alzheimer's Disease with Potential for Near Term Approval](#), *Alzheimer's Research & Therapy*, 2020; 12: 95.
- ⁴Tolar M, et al: [The Path Forward in Alzheimer's Disease Therapeutics: Reevaluating the Amyloid Cascade Hypothesis](#), *Alzheimer's & Dementia*, 2019; 1-8.
- ⁵Hey JA, et al: [Discovery and Identification of an Endogenous Metabolite of Tramiprosate and Its Prodrug ALZ-801 that Inhibits Beta Amyloid Oligomer Formation in the Human Brain](#), *CNS Drugs*, 2018; 32(9): 849-861.
- ⁶Hey JA, et al: [Clinical Pharmacokinetics and Safety of ALZ-801, a Novel Prodrug of Tramiprosate in Development for the Treatment of Alzheimer's Disease](#), *Clinical Pharmacokinetics*, 2018; 57(3): 315–333.
- ⁷Abushakra S, et al: [Clinical Effects of Tramiprosate in APOE4/4 Homozygous Patients with Mild Alzheimer's Disease Suggest Disease Modification Potential](#), *Journal of Prevention of Alzheimer's Disease*, 2017; 4(3): 149-156.
- ⁸Kocis P, et al: [Elucidating the Aβ42 Anti-Aggregation Mechanism of Action of Tramiprosate in Alzheimer's Disease: Integrating Molecular Analytical Methods, Pharmacokinetic and Clinical Data](#), *CNS Drugs*, 2017; 31(6): 495-509.
- ⁹Abushakra S, et al: [Clinical Benefits of Tramiprosate in Alzheimer's Disease Are Associated with Higher Number of APOE4 Alleles: The "APOE4 Gene-Dose Effect,"](#) *Journal of Prevention of Alzheimer's Disease*, 2016; 3(4): 219-228.

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