



NEWS RELEASE

BioVie Announces Completion of Last Patient Treatment Visit in Phase 3 Trial of NE3107 in Mild to Moderate Alzheimer's Disease

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- Expects to announce topline data expected in the November/December timeframe.
- Enrolled patients had underlying medical conditions that are known risk factors for dementia that NE3107 has the potential to improve.

CARSON CITY, Nev., Sept. 26, 2023 (GLOBE NEWSWIRE) -- BioVie Inc., (NASDAQ: BIVI) ("BioVie" or the "Company") a clinical-stage company developing innovative drug therapies for the treatment of neurological and neurodegenerative disorders and advanced liver disease, today announced that the last patient has completed the last visit at week 30 in its multicenter, randomized, placebo-controlled Phase 3 study (**NCT04669028**) of NE3107 in patients with mild to moderate Alzheimer's Disease (AD).

"Now that the last patient has completed the last treatment visit, our clinical team can begin the process leading to database lock," stated Dr. Joseph Palumbo, BioVie's Head of R&D and Chief Medical Officer. "We remain on track to announce topline data on the cognitive and functional assessments by approximately the end of November 2023 with additional biomarker data on TNF α , amyloid β , phospho-tau, Neurofilament light (NfL), and others to follow."

"We are cautiously optimistic about what to expect later this year based on data previously seen from our Phase 2 exploratory biomarker trial," commented Cuong Do, BioVie's President and CEO. "We do not need to show a reversal of cognitive decline as demonstrated in the Phase 2 trial for the current trial to be considered successful. If NE3107 demonstrates a slowing of cognitive decline equivalent to or better than the various monoclonal antibodies, we win because NE3107 is an oral agent that has been demonstrated to be safe in various trials thus far. Furthermore, we do not need to demonstrate efficacy and statistical significance across the board or with all the pre-specified subgroups such as mild- vs. moderate-AD, A β positive vs. negative, Hispanics vs. non-Hispanic, insulin-resistant vs. not, etc. A win in one or more subgroups is still a big win for the patient community and the company."



The Company's clinical monitors have started the process working with each clinical site to ensure that the electronic data capture (EDC) database properly reflects the assessments captured during the various clinical visits. This is the critical first step to creating and locking the database for analyzing the trial results and the eventual submission to the FDA for their review. The trial's Statistical Analysis Plan (SAP) that pre-specifies the analyses and treatment populations and subgroups will be submitted to the FDA prior to locking the EDC.

About the NCT04669028 Trial

The NCT04669028 trial is a Phase 3, double-blind, randomized, placebo-controlled, parallel group, multicenter study of NE3107 in 316 to 400 patients who have mild- to moderate-AD and CDR 1-2 and MMSE 14-24. The study has co-primary endpoints looking at cognition using the Alzheimer's Disease Assessment Scale-Cognitive Scale (ADAS-Cog 12) and function using the Alzheimer's Disease Cooperative Study-Clinical Global Impression of Change (ADCS-CGIC). The study was 80% powered with 316 patients, assuming a 20% drop-out rate. The Company chose to increase patient enrollment to over 400 after the trial started. Patients went through two weeks each of 5 mg and 10 mg BID dose titration followed by 26 weeks of 20 mg twice daily vs. placebo, randomized 1:1.

At baseline, the majority of the study population are coded with abdominal obesity (85%), hypertension (61%), and impaired glucose metabolism (IFG/T2D; 52%). Almost half of all patients (47%) are coded as having some degree of insulin resistance, 40% and 30% of patients are coded as having hypertriglyceridemia and hypercholesterolemia, respectively; and patients are coded as having elevated inflammatory markers. Since these are known dementia risk factors, we believe NE3107's potential ability to help patients improve on some of these factors, as shown in some prior clinical trials, suggests that it may help patients improve on cognitive metrics in this trial.

Both A β ⁺ and A β ⁻ patients with dementia were enrolled in the study and had, at baseline, comparable CDR-SB scores indicative of mild dementia. At baseline, enrolled A β ⁺ patients had worse ADAS-Cog12 and MMSE scores (indicating lower cognitive functioning), while the enrolled A β ⁻ patients had significantly higher inflammation, insulin resistance, IFG, and hypertension, compared to their A β ⁺ counterparts.

Subgroup analysis reveal higher degrees of impaired glucose metabolism and insulin resistance among the APOE ϵ 4⁻ patients compared to their APOE ϵ 4⁺ counterparts and comparable baseline MMSE scores, indicating that both groups had mild to moderate cognitive impairment. Investigators in this study concluded that in the absence of classical risk markers, such as A β ⁺ and APOE ϵ 4⁺, central obesity (high waist-to-hip ratio) and age-related systems dysregulation, involving inflammation (elevated CRP, RANTES, and C1q), hyperglycemia, insulin resistance, dyslipidemia, and hypertension, may contribute to probable AD and disease progression.

Prior clinical results indicate that NE3107 may be capable of reducing inflammation in a manner that was in some

cases significantly correlated with observed improvements in cognition. Specifically, in July 2023, the Company presented a poster detailing the epigenetic basis for how NE3107 may have the potential to regulate methylation of specific genes in a manner that significantly correlated with observed cognitive and biomarker improvements at the Alzheimer's Association's International Conference (AAIC) held in Amsterdam from July 16 through July 20, 2023. The poster presentation titled Treatment-Induced Epigenetic Modifications in MCI and Probable Alzheimer's (Reading C, et al.), showed how patients with clinical dementia treated with NE3107 for three months saw significant reductions in the level of DNA methylation, and that such reductions were, in some cases, significantly correlated with observed improvements in various cognitive measures (e.g., ADAS-Cog11, CDR, ADCOMS, QDRS) and biomarkers (including TNF α , CSF p-Tau/A β 42, precuneus glutathione). NE3107's potential ability to reduce inflammation and insulin resistance suggests that it may be of benefit to both A β ⁺ and A β ⁻ patients as well as APOE ϵ 4⁺ and APOE ϵ 4⁻ patients.

Table 1. Baseline Characteristics

Characteristic	All N=378	A β ⁺ ^a n=57	A β ⁻ ^b n=77	P	APOE ϵ 4 ⁺ n=97	APOE ϵ 4 ⁻ n=259	P
Age, mean (SE) y	73 (0.3)	76 (0.8)	72 (0.6)	**	73 (0.6)	73 (0.4)	-
Female, %	55	53	67	-	64	64	-
High WHR ^c , %	85	84	84	-	81	82	-
FPG, mean, mg/dL	112	100	112	*	106	115	*
IFG, %	32	18	35	#	25	36	-
T2D, %	20	14	22	-	17	25	-
Fasting insulin, mean (SE), μ U/mL	16 (1.1)	10 (1.0)	15 (2.4)	*	12 (1.1)	17 (1.6)	*
High (>23), %	15	9	15	-	10	17	-
HOMA2-IR, mean (SE)	1.8 (0.1)	1.3 (0.2)	1.9 (0.2)	*	1.5 (0.1)	1.9 (0.1)	*
1.4-2.5, %	27	13	29	##	24	27	-
>2.5, %	20	15	21	-	15	22	-
MAGE, mean (SE), mg/dL	70 (2.5)	62 (3.4)	68 (4.6)	-	68 (4.2)	71 (3.1)	-
CRP, mean (SE), mg/L	4.1 (0.4)	1.8 (0.2)	6.3 (1.2)	**	3.6 (0.8)	4.3 (0.4)	-
>3, %	67	13	28	#	20	32	-
>10, %	18	0	18	##	4	21	-
C1q, mean (SE), mg/dL	22 (0.2)	21 (0.4)	44 (0.5)	-	21 (0.3)	22 (0.2)	-
High (>22), %	32	28	33	-	34	31	-
RANTES, mean (SE), pg/mL	28 (1.6)	23 (2.0)	33 (2.8)	**	26 (2.8)	29 (2.0)	-
Cholesterol, mean (SE), mg/dL	189 (4)	174 (5)	175 (5)	-	183 (4)	180 (3)	-
High (>199), %	30	22	26	-	30	30	-
Triglycerides, mean (SE), mg/dL	143 (4)	130 (9)	143 (8)	-	132 (5)	148 (5)	-
High (>149), %	40	27	36	-	36	41	-
High BP (>130/80), %	61	47	71	##	54	63	-
Low BP (<66 diastolic), %	13	12	2.5	##	15	4.1	##
CDR-SB, mean (SE)	6.3 (0.1)	6.6 (0.3)	6.2 (0.2)	-	6.6 (0.2)	6.1 (0.1)	**
MMSE, mean (SE)	20 (0.1)	20 (0.1)	21 (0.2)	**	20 (0.2)	20 (0.1)	-
ADAS-Cog12, mean (SE)	28 (0.4)	31 (1.4)	25 (0.7)	**	30 (0.9)	27 (0.5)	**
ADCS-ADL, mean (SE)	55 (0.6)	57 (1.4)	57 (1.2)	-	56 (1.0)	55 (0.5)	-
A β 42/40 ratio, mean (SE)	0.095 (0.001)	0.085 (0.001)	0.107 (0.001)	**	0.089 (0.002)	0.098 (0.001)	**

^a Positive Precivity test; ^b Negative Precivity test; ^c For females WHR>0.8 and for males WHR>0.95; Mann-Whitney * P <0.05, ** P <0.01; Fisher's Exact Test # <0.05, ## <0.01.

NE3107 is an oral small molecule, blood-brain permeable anti-inflammatory insulin sensitizer that binds extracellular signal-regulated kinase. BioVie's Phase 3 trial is the largest study to date to evaluate the safety and efficacy of NE3107 in patients with AD. NE3107 is the only anti-inflammatory agent currently in phase 3 development for AD. Consistent with the proposed anti-inflammatory and insulin-sensitizing properties of NE3107, this phase 3 study was designed to confirm the efficacy and safety of NE3107 treatment in patients with probable AD.

About BioVie

BioVie Inc. (NASDAQ: BIVI) is a clinical-stage company developing innovative drug therapies for the treatment of neurological and neurodegenerative disorders and advanced liver disease. In neurodegenerative disease, the Company's drug candidate NE3107 inhibits inflammatory activation of ERK and NFkB (e.g., TNF signaling) that leads to neuroinflammation and insulin resistance, but not their homeostatic functions (e.g., insulin signaling and neuron growth and survival). Both are drivers of Alzheimer's and Parkinson's diseases. The Company is conducting a potentially pivotal Phase 3 randomized, double-blind, placebo-controlled, parallel-group, multicenter study to evaluate NE3107 in patients who have mild to moderate Alzheimer's disease (NCT04669028). Results of a Phase 2 investigator initiated trial (NCT05227820) showing NE3107-treated patients experienced improved cognition and biomarker levels were presented at the Clinical Trial in Alzheimer's Disease (CTAD) annual conference in December 2022. An estimated six million Americans suffer from Alzheimer's. A Phase 2 study of NE3107 in Parkinson's disease (NCT05083260) has completed, and data presented at the International Conference on Alzheimer's and Parkinson's Disease and Related Neurological Disorders conference in Gothenburg, Sweden in March 2023 showed significant improvements in "morning on" symptoms and clinically meaningful improvement in motor control in patients treated with a combination of NE3107 and levodopa vs. patients treated with levodopa alone, and no drug-related adverse events. In liver disease, the Company's Orphan drug candidate BIV201 (continuous infusion terlipressin), with FDA Fast Track status, is being evaluated in a US Phase 2b study for the treatment of refractory ascites due to liver cirrhosis. BIV201 is administered as a patent-pending liquid formulation. The active agent is approved in the U.S. and in about 40 countries for related complications of advanced liver cirrhosis. For more information, visit <http://www.bioviepharma.com/>.

Forward-Looking Statements

This press release contains forward-looking statements, including statements regarding the Company's strategy, plans and objectives, such as statements regarding the Company's anticipated timeline for announcing results from the NE3107 Phase 3 potential pivotal trials. Forward-looking statements may generally be identified by words such as "expect," "look forward to," "anticipate" "intend," "plan," "believe," "seek," "estimate," "will," "project" or words of similar meaning. Although BioVie Inc. believes such forward-looking statements are based on reasonable

assumptions, it can give no assurance that its expectations will be attained. Actual results may vary materially from those expressed or implied by the statements herein due risks associated with conducting and completing clinical trials, including our reliance on third parties to conduct our clinical trials, to successfully defend potential future litigation, our ability to raise capital when needed on reasonable terms, changes in local or national economic conditions as well as various additional risks, many of which are now unknown and generally out of the Company's control, and which are detailed from time to time in reports filed by the Company with the SEC, including quarterly reports on Form 10-Q, reports on Form 8-K and annual reports on Form 10-K. BioVie Inc. does not undertake any duty to update any statements contained herein (including any forward-looking statements), except as required by law.

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