NEWS RELEASE

Blinded Data Presented at CTAD Suggest that NE3107 is Biologically Active and May Have Impact on Cognitive, Biomarker, and Imaging Endpoints Among Mild to Moderate Alzheimer's Disease Patients

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- Statistically significant population changes from baseline were observed for all primary and secondary cognitive and functional assessments measured: ADAS-Cog12, ADCS-CGIC, MMSE, CDR, CDR-SB, ADCOMS, and ADL. [1]
- An apparent significant reduction in amyloid burden from baseline was observed in the population.
    - A significant change from baseline was observed in the Amyloid β 42/40 ratio and Amyloid Probability Score as shown by the PrecivityAD® tests from C2N Diagnostics.
    - Increased FDG-PET SUVRs were observed in 10 out of 21 patients in a brain imaging sub-study, which is suggestive of reduced amyloid burden.
- Statistically significant increases in insulin and beta cell function were observed without any hypoglycemia, which suggests target engagement and lends support for a previously identified potential mechanism of action for NE3107.
- The Company expects to announce unblinded, topline data from this trial in late November or early December .

CARSON CITY, Nev., Oct. 25, 2023 (GLOBE NEWSWIRE) -- BioVie Inc., (NASDAQ: BIVI) (“BioVie” or the “Company”) a clinical-stage company developing innovative drug therapies for the treatment of advanced liver disease and neurological and neurodegenerative disorders, announced that blinded data on cognitive, biomarker and imaging findings from the recently completed Phase 3 clinical trial (**NCT04669028**) of NE3107 in the treatment of mild to moderate Alzheimer’s Disease (AD) were presented today as an oral presentation at the 16 th Clinical Trials on Alzheimer’s Disease (CTAD) in Boston, MA,

The presentation, Clinical Outcomes from a Phase 3, Randomized, Placebo-Controlled Trial of NE3107 in Subjects

with Mild to Moderate Probable Alzheimer's Disease , detailed a cross sectional analysis of blinded data from BioVie's Phase 3 study and discussed participants whose data were available for analysis as of October 18, 2023 (n=322). These preliminary analyses will be updated once the complete and final dataset becomes available and when the study database is locked, unblinded and analyzed in full.

The blinded data presented suggest that NE3107 is a biologically active compound exerting potential effects as observed by biomarker, imaging, cognitive and functional assessments. Population changes from baseline were observed, with some patients demonstrating an improvement after 30 weeks of treatment with the double blinded oral study drug (NE3107 or matched placebo) as compared to baseline, while many were also observed to have worsened, which is consistent with the natural progression of the disease (Figure 1).

Since study participants diagnosed with dementia would typically be expected to worsen or experience no change as a function of time-related disease progression without active treatment, the observed "scattering" pattern in the blinded data suggests that NE3107 may have an impact on cognition and function among study participants, and the magnitude of cognitive and functional improvements observed is not consistent with typical placebo response observed in historical clinical studies in AD. While patients were randomized 1:1 to NE3107 vs. placebo, a plurality of subjects showed evidence of improvement and may have demonstrated effects unrelated to the administration of the study drug (NE3101 or placebo).

Figure 1. Cognitive and functional changes from baseline

Consistent directionality and significant correlations ($p<0.0001$) were observed among differing assessment scales, which underscores the uniformity of change on different measures of the patients' condition over the course of the 30-week study.

Spearman r	CGIC	MMSE	CDR	CDR SB	ADCOMS	ADL
ADAS-Cog12	+0.24	-0.46	+0.23	+0.23	+0.51	-0.40
CGIC		-0.50			+0.46	-0.40
MMSE			-0.38	-0.42	-0.63	+0.34
CDR-SB					+0.79	-0.21
ADCOMS						-0.23

All correlations were significant at $p<0.0001$

An apparent significant reduction in the population's amyloid burden was observed (Figure 2), as measured by C2N

Diagnostics' PrecivityAD® test. The PrecivityAD® blood test is a FDA-validated assay that relies on the $A\beta_{42}/A\beta_{40}$ ratio and other factors to predict the Amyloid Probability Score, which identifies whether a patient is likely to have the presence or absence of amyloid plaques in the brain and is highly correlated to amyloid levels measured by PET.

A low ratio of $A\beta_{42}/A\beta_{40}$ has been shown to be a reliable predictor of the amyloid-PET status [2] and disease progression. [3] The scattering pattern in the blinded data and the large number of patients experiencing an increase in this ratio compared to baseline may be suggestive of NE3107's effect. These data showed that 36.5% of patients with positive PrecivityAD® scores at baseline reverted to having negative results after 30 weeks, whereas 14.4% of patients with negative scores at baseline converted to positive results over this timeframe.

Figure 2. Changes in Amyloid burden

Statistically significant increases in insulin and beta cell function (HOMA2-%B +13.5%, $p<0.0001$) and decreased insulin sensitivity (HOMA2-%S -21.2%, $p<0.0001$) were observed in the blinded data and may further confirm NE3107's potential ability to improve insulin signaling observed in previous trials. No cases of hypoglycemia were reported in the study.

In a small doubled blinded imaging sub-study, increased FDG-PET Standard Uptake Value Ratios (SUVRs) were observed in the blinded data in 10 out of 21 patients. FDG-PET is a recognized biomarker for neurodegeneration, and lower SUVRs are associated with disease progression. [4]

The rate and nature of adverse events in the blinded data appear consistent with prior clinical studies of NE3107.

"The blinded data presented at CTAD show encouraging changes from baseline that would not typically be seen without a treatment effect, which provides us with confidence that NE3107 may show a clear benefit over placebo when the data from this trial is unblinded in the coming weeks," commented Joseph Palumbo, BioVie's Chief Medical Officer. "We believe NE3107 has the potential become to effective multi-mechanistic treatment for Alzheimer's that is safe and can be orally administered."

The last patient came in for the last treatment visit in late September 2023, and the Company is currently resolving outstanding database queries and preparing for database freeze and data unblinding. The Company expects to announce unblinded, topline data from this trial in the November/December timeframe.

About the NCT04669028 Trial

The NCT04669028 trial is a Phase 3, double-blind, randomized, placebo-controlled, parallel group, multicenter study of NE3107 in 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). 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.

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 Associate'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 TNFα, CSF p-Tau/Aβ 42, precuneus glutathione). NE3107's potential ability to reduce inflammation and insulin resistance suggests that it may be of benefit to both Aβ+ and Aβ− patients as well as APOE ε4+ and APOE ε4− patients.

About NE3107

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 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 and discussed with guidance received from the FDA regarding the design of Phase 3 clinical testing of BIV201 for the treatment of ascites due to chronic liver cirrhosis. 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, which may 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 to the risk that unblinded data is not consistent with blinded data, the Company's ability to successfully raise sufficient capital on reasonable terms or at all, available cash on hand and contractual and statutory limitations that could impair our ability to pay future dividends, our ability to complete our pre-clinical or clinical studies and to obtain approval for our product candidates, our ability to successfully defend potential future litigation, changes in local or national economic conditionsas 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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[1] ADAS-Cog12: Alzheimer's Disease Assessment Scale-Cognitive; ADCS-CGIC: Alzheimer's Disease Cooperative Study-Clinical Global Impression of Change; MMSE: Mini-Mental State Examination; CDR: Clinical Dementia Rating; CDR-SB: Clinical Dementia Rating-Sum of Boxes; ADCOMS: Alzheimer's disease composite score; ADCS-ADL: Alzheimer's Disease Cooperative Study-Activities of Daily Living

[2] Doecke et al. Neurology Apr 2020, 94 (15) e1580-e1591

[3] Pérez-Grijalba et al. J Prev Alzheimers Dis. 2019;6(1):34-41

[4] Marcus et al. Clin Nucl Med . 2014 Oct; 39(10): e413–e426.

Photos accompanying this announcement are available at

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