

Vivoryon Therapeutics Provides Update on Business and Progress of Varoglutamstat Clinical Development in Alzheimer's Disease

- VIVIAD Phase 2b study in Europe on track for interim safety readout in mid-2022
- VIVA-MIND Phase 2 study in the U.S. ongoing with one site now open to screen and another eight sites having secured regulatory approval
- Commitment to U.S. patients and market substantiated by confidential submission of draft registration statement for proposed U.S. IPO
- Second manufacturing track initiated to ensure timely availability of study drug beyond VIVA-MIND Phase 2a stage; financial guidance updated accordingly

Halle (Saale) / Munich, Germany October 18, 2021 – Vivoryon Therapeutics N.V. (Euronext Amsterdam: VVY; NL00150002Q7) (Vivoryon), a clinical stage company focused on discovery and development of small molecule medicines to modulate the activity and stability of pathologically altered proteins, today provided an update on its operations and the clinical development progress of the Company's lead candidate, varoglutamstat (PQ912), a small molecule medicine in development to treat Alzheimer's disease (AD). Varoglutamstat is currently being investigated in two Phase 2 clinical trials in patients living with early and mild AD: the European Phase 2b VIVIAD study and the recently initiated Phase 2a/b VIVA-MIND study in the U.S.

Clinical Development of Varoglutamstat

VIVIAD: Vivoryon's European Phase 2b study in patients with mild cognitive impairment and mild AD

In 2020, Vivoryon initiated VIVIAD, a Phase 2b study in Europe designed to investigate the safety, tolerability and efficacy of varoglutamstat compared to placebo over 48 to 96 weeks of treatment in 250 patients suffering from mild cognitive impairment (MCI) and mild AD. Continuously meeting all recruitment objectives despite the ongoing global pandemic, the study is enrolling patients as planned. In the ongoing parallel group dose finding part of the study, the first 90 participants are randomized 1:1:1 between 300 mg varoglutamstat, 600 mg varoglutamstat, and placebo and are twice daily treated for 24 weeks, followed by an interim safety analysis to select the final dose. Patients will then be treated for a minimum of 48 weeks on the selected dose twice daily vs. placebo. A composite Neuropsychological Test Battery (NTB) score will be administered throughout the study in order to assess cognitive efficacy. Additionally, a set of exploratory read-outs including cognitive tests, functional electroencephalogram (EEG), magnetic resonance imaging (MRI) assessments and the analysis of new molecular biomarkers in the cerebrospinal fluid (CSF) will be used to evaluate the



compound's effect on disease pathology. Secondary endpoints include long-term safety and tolerability of varoglutamstat and its efficacy on brain activity, cognition and activities of daily living. To avoid delays in recruitment and as a reaction to COVID-19-related patient and staff protection policies implemented at German study sites, Vivoryon is planning to more than double the originally planned number of study centers. Additional sites in Germany and the Netherlands have already been opened and the Company anticipates to initiate up to 10 additional sites in Spain and Poland over the next weeks. VIVIAD remains on track for an interim safety readout in mid-22 and Vivoryon continues to anticipate final data in the second half of 2023. Details on the study background and design were recently published in the Journal "Alzheimer's Research & Therapy".

VIVA-MIND: Vivoryon's U.S. Phase 2a/b in patients with early AD

Vivoryon is also sponsoring VIVA-MIND, a complementary Phase 2a/b trial in the U.S., which is coordinated by the <u>Alzheimer's Disease Cooperative Study</u> (ADCS) at the University of California San Diego (UCSD) School of Medicine and supported by the National Institute on Aging (NIA), part of the National Institutes of Health (NIH) with a \$15 million grant (NIA award number R01AG061146). VIVA-MIND was initiated in September 2021. The study seeks to enroll 180 patients into the Phase 2a adaptive dose-finding part and is ongoing, with one site now approved to screen participants and a group of another eight sites having secured regulatory approval.

"More than 6 million patients are currently living with Alzheimer's in the U.S. alone, and despite recent developments, a huge need remains for safe, widely available effective disease-modifying therapies," commented Dr. Howard Feldman, Professor of Neurosciences and Director of the ADCS at UC San Diego, and the VIVA-MIND study director. "We are excited to offer those eligible for VIVA-MIND the option to participate in a clinical trial investigating the potential benefits of varoglutamstat, a novel type of AD medication, designed to address several key disease mechanisms.

Based on its mechanism of action and encouraging data from earlier clinical studies, we believe that varoglutamstat is differentiated from other drugs in development, with potential benefits as an oral agent, potentially reduced side effects, and cost, which would make it accessible to a large number of AD patients who are anxiously waiting for new treatment options."

The initial Phase 2a adaptive dose-finding part will investigate a range of 150 mg to 600 mg twice daily. An interim futility analysis is planned for the first half of 2023. If predefined criteria are fulfilled, the trial will pass a stage-gate into the Phase 2b part, enrolling an additional 234 patients treated at the selected dose for at least 72 weeks, with a total of 414 patients being



treated on stable doses of varoglutamstat for 18 months. The primary endpoint for this study is CDR-SB (clinical dementia rating scale - sum of boxes), an established approvable endpoint measuring a combination of cognitive abilities and activities of daily living.

Clinical development strategy

Prior to VIVIAD and VIVA-MIND, Vivoryon completed two clinical studies of varoglutamstat. A first-in-human Phase 1 trial conducted in 205 healthy volunteers showed that varoglutamstat was well-tolerated and also provided important information on dose response and target occupancy. The subsequent first-in-patient Phase 2a trial, SAPHIR, enrolled 120 patients suffering from early AD achieved not only the primary objective of obtaining important safety information, but also showed evidence of the disease-modifying activity of varoglutamstat. The study delivered encouraging results after only 12 weeks of treatment, showing evidence of improving not only pathological hallmarks, but also synaptic function and connectivity, cognition, memory and attention in AD patients. The Company based the selection of endpoints for both VIVIAD and VIVA-MIND on the outcome of SAPHIR as well as the regulatory draft guidelines for AD drug development by FDA and EMA introduced in 2018. By combining these two studies, Vivoryon intends to assess if potential cognitive improvements in patients in the European VIVIAD trial will translate into an established clinical endpoint in patients in the U.S. VIVA-MIND trial.

Business Update

Measures implemented to secure study drug supply beyond VIVA-MIND Phase 2a stage

Vivoryon is committed to efficiently moving varoglutamstat through clinical development. To ensure sustainable study drug supply for the VIVA-MIND U.S. study, Vivoryon has decided to expand its manufacturing capabilities for production of active pharmaceutical ingredient (API) by initiating a second line of manufacturing with an additional partner. This will increase the total number of manufacturing sites for varoglutamstat to three on two different continents, providing supply for VIVA-MIND beyond the ongoing Phase 2a adaptive dose finding part, as well as for potential future studies in other geographies, with the added benefit of increasing flexibility to react to global challenges such as the ongoing pandemic. To account for the costs associated with these measures, Vivoryon is updating its financial guidance. According to current planning and estimates, the Company now expects a cash reach until mid-2022 (previous guidance: Q2 2023). A detailed update on anticipated working capital requirements and associated potential financing activities as well as resulting timelines will be given in the context of Vivoryon's regular filings.



Vivoryon substantiates commitment to U.S. patients and market with confidential submission of draft registration statement for proposed U.S. IPO

The commencement of the VIVA-MIND clinical study demonstrates Vivoryon's commitment to the U.S. patients and market. It is Vivoryon's intention to establish a U.S. listing on Nasdaq. To this effect, Vivoryon recently confidentially submitted a draft registration statement on Form F-1 to the U.S. Securities and Exchange Commission for purposes of a potential initial public offering of its common shares in the United States. While the timing of the transaction, if any, is uncertain and will depend on market conditions, among other things, Vivoryon expects the size and other characteristics of the transaction to be such that an approved EU prospectus, in addition to the U.S. registration statement on Form F-1, would not be required.

"We are following a diligently designed development strategy and making continued progress towards overcoming the challenges of drug development in AD, moving varoglutamstat through clinical development as efficiently as possible," said Dr. Ulrich Dauer, CEO of Vivoryon. "We are thrilled to partner with the outstanding ADCS team on our first clinical study in the U.S. Knowing that ADCS has selected varoglutamstat from the large number of different programs competing for their support is extremely encouraging and a great validation of our team's work over the past years. Looking into the future and in light of the global pandemic, we have implemented a number of measures to ensure that Vivoryon is well funded and able to deliver on our objective of bringing varoglutamstat to as many patients as possible."

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About Vivoryon Therapeutics N.V.

Vivoryon is a clinical-stage biotechnology company focused on developing innovative small molecule-based medicines. Driven by our passion for ground-breaking science and innovation, we strive to change the lives of patients in need suffering from severe diseases. We leverage our



in-depth expertise in understanding post-translational modifications to develop medicines that modulate the activity and stability of proteins which are altered in disease settings. Beyond our lead program, varoglutamstat, which is in Phase 2 clinical development to treat Alzheimer's disease, we have established a solid pipeline of orally available small molecule inhibitors for various indications including cancer, inflammatory diseases and fibrosis. www.vivoryon.com

About Varoglutamstat (PQ912)

Vivoryon's most advanced medicine in development, varoglutamstat, is a differentiated smallmolecule inhibitor with a unique dual mechanism of action (MOA) designed to address all hallmarks of AD: Abeta pathology, tau pathology, neuroinflammation and synaptic impairment. Firstly, varoglutamstat blocks the enzyme glutaminyl cyclase (QPCT), which is found in the brains of AD patients in much higher quantities than in healthy individuals and which has been shown to be linked to AD pathology. QPCT catalyzes the formation of N3pE amyloid a particularly neurotoxic variant of Abeta peptides, which is not present in the brains of healthy individuals and only found in AD patients. N3pE amyloid in the brain acts as a seeding element for Abeta aggregation, thus providing a starting point for plaque formation. It and has been described to correlate with the cognitive ability of AD patients. Varoglutamstat acts further upstream of other therapeutics, aiming to prevent the toxic Abeta variant N3pE from forming and seeding plaques, rather than reducing them after they have formed. Secondly, varoglutamstat exploits the fact that the enzymatic activity of glutaminyl cyclases is also required for the stability and full potency of the proinflammatory protein CCL2, with QPCTL, an isoform of QPCT, upregulating CCL2 by converting it into pE-CCL2. Thus, blocking QPCTL holds the potential to reduce neuroinflammation. Moreover, CCL2 is also a promoter of the tau pathology, which, in turn is linked to synaptic impairment, enabling simultaneous targeting of these pathologies. In contrast to many other drugs in development in AD which are antibodies that have to be injected or infused, varoglutamstat can be very conveniently administered as an oral pill.

Forward Looking Statements

This press release includes forward-looking statements, including, without limitation, those regarding the business strategy, management plans and objectives for future operations of the Vivoryon Therapeutics N.V. (the "Company"), estimates and projections with respect to the market for the Company's products and forecasts and statements as to when the Company's products may be available. Words such as "anticipate," "believe," "estimate," "expect," "forecast," "intend," "may," "plan," "project," "predict," "should" and "will" and similar expressions as they relate to the Company are intended to identify such forward-looking statements. These forward-looking statements are not guarantees of future performance; rather they are based on the Management's current expectations and assumptions about future events and trends, the economy and other future conditions. The forward-looking statements involve a number of known and unknown risks and uncertainties. These risks and uncertainties and other factors could materially adversely affect the outcome and financial effects of the plans and events described herein. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements and from expectations. As a result, no undue reliance should be placed on such forward-looking statements. This press release does not



contain risk factors. Certain risk factors that may affect the Company's future financial results are discussed in the published annual financial statements of the Company. This press release, including any forward-looking statements, speaks only as of the date of this press release. The Company does not assume any obligation to update any information or forward-looking statements contained herein, save for any information required to be disclosed by law.

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