Probiodrug to present at 255th ACS National Meeting & Exposition

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The Inhibition of Glutaminyl Cyclase as a New Concept for the Treatment of Alzheimer's Disease: PQ912, the First-In-Class QC-Inhibitor in Clinical Development for AD

HALLE (SAALE), Germany, 16 March 2018 - Probiodrug AG (Euronext Amsterdam: PBD), a biopharmaceutical company developing novel therapeutic solutions to treat Alzheimer's disease (AD), announced today that an oral presentation will be held at the 255th National Meeting & Exposition of the American Chemical Society (ACS). The conference will take place in New Orleans, USA from 18 to 22 March 2018.

Dr Ulrich Heiser, Director Medicinal Chemistry/CMC will give a presentation entitled *"Inhibition of glutaminyl cyclase as a new concept for the treatment of Alzheimer's disease: PQ912, the first-in-class QC-inhibitor in clinical development for AD"* on Sunday, 18 March 2018, at 2:45 pm CST in La Nouvelle Orleans Ballrooms A/B - Ernest N. Morial Convention Center. The presentation will be part of the Division of Medicinal Chemistry.

N-terminally pyroglutamylated forms of the Abeta peptide (pEAbeta) have been identified to seed and sustain the formation of highly neuro-/synaptotoxic oligomers. Therefore, they are assumed to be an early key pathological culprit in AD pathology. With the identification of the zinc-dependent enzyme Glutaminyl Cyclase (QC) as the responsible enzyme of pEAbeta formation, the application of QC inhibitors emerged as a new disease modifying treatment concept for AD.

The course towards the identification of the QC-inhibitor PQ912 will be presented. Starting out from one of the first potent representatives PBD150, an attractive candidate molecule for development was obtained. With molecular features rendering the starting PBD150 unsuitable, the comprehensive SAR study into main areas of the molecule, namely the metal-binding group and the central scaffold, led to the identification of a new class of inhibitors. Thereby challenges due to the specific requirements when addressing the zinc-dependent target QC in the CNS were mastered: besides the enablement of a sufficient blood brain barrier passage, the important selectivity against metal-dependent off-targets as well as a sufficient and pH-independent inhibitory potency had to be maintained. The talk will also include core results from pre-clinical and clinical development.

Dr Inge Lues, Chief Development Officer of Probiodrug, commented:
"Our first in class small molecule QC-I PQ912, selected for development due to a good drug-like profile and a comprehensive preclinical proof of concept data package, shows an excellent dose- dependent brain penetration and target engagement in man and an attractive therapeutic window. The first 3-month trial in early AD patients provided a set of positive pharmacodynamic and efficacy results which all support the underlying concept of QC-Inhibition reducing the seeding of highly synaptotoxic oligomers and providing guidance for the outline of the next Phase 2b study, which is in the planning process."

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N**otes to Editors:**

About Probiodrug AG

Headquartered in Halle (Saale), Germany, Probiodrug AG (Euronext Amsterdam: PBD) is a biopharmaceutical company focused on the development of new therapeutic products for the treatment of Alzheimer's disease (AD). Probiodrug has identified a new therapeutic concept linked to disease initiation and progression. The development approaches are targeting a key neuro-/synaptotoxic component of the pathology, pyroglutamate-Abeta (pGlu-Abeta) as a therapeutic strategy. Its lead product, PQ912, has successfully completed a Phase 2a (SAPHIR) study. The company's pipeline also includes PBD-C06, an anti-pGlu-Abeta-specific monoclonal antibody, in preclinical development. Probiodrug has medical use and composition of matter patents related to the inhibition of QC and anti-pGlu-Abeta-specific monoclonal antibodies, and has, in the Company's view, a leading position in this field of research.

Founded in 1997 by Hans-Ulrich Demuth and Konrad Glund, the company successfully developed a novel therapeutic concept for diabetes - the DP4 inhibitors - which provided the basis for a novel class of antidiabetics - the gliptins. Today, Probiodrug aims to become a leading company in the development of AD treatments and to thereby provide a better life for Alzheimer's disease patients.

About PQ912

Probiodrug's lead product candidate, PQ912, is a highly specific and potent inhibitor of Glutaminyl Cyclase (QC), the enzyme catalyzing the formation of synaptotoxic pGlu-Abeta. PQ912 has shown therapeutic effects in AD animal models. A Phase-1 study in healthy young and elderly volunteers revealed a dose dependent exposure and showed good safety and tolerability up to the highest dose with >90% target occupancy in the spinal fluid. In June 2017, Probiodrug announced top-line data of the Phase-2a SAPHIR trial of PQ912 and presented the study results at CTAD 2017. The positive effects seen on secondary exploratory efficacy markers strongly support (a) the hypothesis of pGlu-Abeta being synaptotoxic and (b) the therapeutic concept pursued by Probiodrug. The study revealed a positive benefit risk ratio of PQ912 and provides important guidance how to move forward in the development of PQ912 as a disease-modifying drug for AD. Altogether, the results make the program highly attractive for further development; the company has initiated the preparation of a Phase 2b core program.

www.probiodrug.de

About Alzheimer's disease

Alzheimer's disease is a neurological disorder, which is the most common form of dementia, and ultimately leads to death. Today, 47 million people live with dementia worldwide, and this number is projected to treble to more than 131 million by 2050, as the global population ages. Dementia also has a huge economic impact. Alzheimer's has an estimated, global societal cost of US$ 818 billion, and it will become a trillion dollar disease by 2018. (World Alzheimer Report 2016).

Forward Looking Statements

Information set forth in this press release contains forward-looking statements, which involve a number of risks and uncertainties. The forward-looking statements contained herein represent the judgment of Probiodrug AG as of the date of this press release. Such forward-looking statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any such statements to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based.