

# Umecrine Cognition presents nonclinical data at AD/PD™ 2024 further elucidating golexanolone's mode-of-action in Parkinson's disease

**STOCKHOLM – March 6, 2024.** Umecrine Cognition today announces that the company will attend the 18th International Conference on Alzheimer's and Parkinson's Diseases 2024 in Lisbon, Portugal, March 5-9th. At the meeting, the company will present recent nonclinical data exhibiting positive effects on Parkinsonian symptoms and further supporting the proposed mechanism of action of golexanolone in Parkinson's disease.

More than 6 million people globally suffer from Parkinson's disease (PD) – the second-most common neurodegenerative disease in the world – which is hallmarked by progressively deteriorated motor symptoms, perturbed cognitive functions and declined mental health. Current treatment regimens of PD largely build upon levodopa (L-DOPA) treatment. Levodopa, however, does not possess any disease-modifying attributes and is known to eventually induce debilitating side effects. In neurodegenerative diseases, immune cells in the brain are activated, causing damaging neuroinflammation and disturbed neural signaling. Previous research points toward increased levels of GABA in the affected areas of the brain as a possible culprit in disease progression, possibly by decreasing levels of the enzyme tyrosine hydroxylase (TH). As TH decreases, dopamine synthesis is affected and motor symptoms worsen. Another molecular hallmark of PD is increased levels of the neurotoxic protein alpha-synuclein (a-syn). As aggregations of this protein increase, symptoms worsen. Golexanolone has previously been shown to decrease neuroinflammation levels in other disease models and to normalize PD symptomology.

In the study to be presented at AD/PD™ 2024, golexanolone improved both motor symptoms and non-motor symptoms, including fatigue, anxiety and depression ( $p < 0.05$ ). Importantly, golexanolone partially impeded the decrease in TH ( $p < 0.05$ ) and successfully prevented the increase of a-syn ( $p < 0.01$ ). Furthermore, analyses showed a decreased activation of brain immune cells, indicating lowered levels of neuroinflammation ( $p < 0.05$ ).

Professor Nicolaas Bohnen, at the Morris K. Udall Center of Excellence for Parkinson's Disease Research & Parkinson's Foundation Center of Excellence, University of Michigan, Ann Arbor, MI, USA, further comments: "the presence of sustained treatment effects on alpha-synuclein aggregates suggests a high potential for disease modification, which is a current unmet need in the Parkinson's field. The triple target validation of improving dopamine synthesis, reducing neuroinflammation and the a-syn lowering effects makes golexanolone a captivating drug for human PD clinical trials".

"It is encouraging that the positive effect on neuroinflammation which has previously been reported for golexanolone in other disease models has now been repeated in a pre-clinical model of Parkinson's disease. Furthermore, the significant rate reduction in the loss of TH, which is the main dopamine-producing enzyme, and the sustained benefit on alpha-synuclein puts golexanolone in a favorable position, not only as a symptomatic treatment but as a potentially disease-modifying drug. The GABA system has evolved into a new and important target in the therapeutic area, rendering golexanolone a useful option in improving both motor and non-motor symptoms that carry negative effects on patients' quality of life. We look forward to presenting our results and engaging in discussions with international experts in the disease area," says Magnus Doverskog, SVP and Chief Scientific Officer, Umecrine Cognition.

The company's abstract has been accepted for presentation at the on-site paper poster session "Alpha-Synucleinopathies, Therapeutic Targets, Mechanisms for Treatment" on Wednesday, March 6th, as well as at the oral ePoster presentation, a virtual format for digital meeting attendees. A representative from Umecrine Cognition's scientific collaborator will present the abstract titled: Golexanolone, a GABA-A receptor-modulating steroid antagonist, improves fatigue, anxiety, depression and some cognitive and motor alterations in 6-OHDA rats (abstract #2586).

**For further information, please contact:**

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**About Umecrine Cognition AB**

Umecrine Cognition AB develops a completely new class of pharmaceuticals against neurological disturbances in the brain that may arise as a consequence of several underlying diseases, leading to strongly reduced cognitive functions and wakefulness. Results from an internationally recognized clinical Phase 2 study indicates that the company's most advanced drug candidate, golexanolone, normalizes the brain's signaling and improves cognition as well as wakefulness in patients diagnosed with hepatic encephalopathy. The continued drug development will initially focus on patient groups whose symptoms arise from chronic liver diseases. The mode of action is however relevant in a number of other indications. For more information, visit [www.umecrinecognition.com](http://www.umecrinecognition.com).

**Attachments**

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