



NEWS RELEASE

# ChromaDex Shares Findings from First-Ever Peer-Reviewed Published Clinical Study Analyzing the Promising Effect of Nicotinamide Riboside (NR) Supplementation in Patients with Parkinson's Disease (PD)

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New Phase I research showcases NR supplementation significantly increased cerebral NAD levels, and decreased levels of inflammatory cytokines in Parkinson's disease (PD) patients

LOS ANGELES--(BUSINESS WIRE)-- ChromaDex Corp. (NASDAQ:CDXC) today announced promising findings from a first-of-its-kind clinical study, as reported in the peer-reviewed journal **Cell Metabolism** by a team of scientists led by Prof. Charalampos Tzoulis, Haukeland University Hospital and University of Bergen, in Norway. The clinical trial was part of the ChromaDex External Research Program (CERP™) and investigated the company's proprietary Niagen® ingredient (patented nicotinamide riboside, or "NR") in patients with Parkinson's disease (PD). Results of the phase I clinical trial showed that NR supplementation significantly increased cerebral nicotinamide adenine dinucleotide (NAD) levels, and resulted in altered cerebral energy metabolism and decreased levels of inflammatory cytokines in patients with PD. This clinical study is a milestone in NR and PD research and builds upon previous preclinical studies exploring the positive impact of NR on neurodegenerative diseases.

Parkinson's disease is a common neurodegenerative disorder, affecting more than 10 million people worldwide. It is largely characterized by progressive impairments in motor function, including tremor, stiffness, slow movement, and poor balance, as well as in non-motor functions, such as abnormal sleep patterns, gastrointestinal dysfunction, and cognitive impairment, or dementia. Abnormal energy metabolism due to dysfunction in the mitochondria, the powerhouses of the cell, has been linked to PD and is believed to play a role in the initiation and progression of the

disease. As such, this study assessed NR as a potential therapeutic strategy targeting mitochondrial function and energy metabolism in PD patients.

"The results of this phase I study in humans are an encouraging step forward for Parkinson's research and a potentially promising alternative for PD therapy," said Dr. Andrew Shao, ChromaDex Senior Vice President of Global Scientific & Regulatory Affairs. "We look forward to further research aimed at understanding the role of NR supplementation in Parkinson's patients."

"We are very excited about these results," said Prof. Charalampos Tzoulis, Professor of Neurology and Neurogenetics, Director of the K.G Jebsen Center for Translational Research in Parkinson's disease, and Co-Director of the Neuro-SysMed Research Center, University of Bergen and Haukeland University Hospital, Bergen, Norway. "This trial represents a novel approach in experimental PD-therapy. We believe that augmenting the brain's NAD metabolism will not only target and rectify disease-related processes specific to PD, but may also optimize neuronal metabolism and fortify neurons, rendering them more resilient against age-related stress and neurodegenerative diseases. The results of the trial are highly encouraging and nominate NR as a potential neuroprotective therapy for PD, warranting further investigation in larger trials. A phase II study is already ongoing at our Center, and estimated to conclude by the end of 2023." The phase II NO-PARK study will feature NAD supplementation in 400 PD patients for one full year. Public information on this study can be viewed here: <https://neuro-sysmed.no/dis-clinic-stud/parkinsons-disease/> and at [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

This randomized, double-blinded, placebo-controlled human phase I clinical study featured 30 newly diagnosed patients with PD who never received dopamine therapy (a standard treatment used to treat motor symptoms in PD patients). The patients were randomized into two groups - one group was provided 1000mg/day of NR and the other a placebo. Clinical, neuroimaging and molecular measures were used to assess all patients at baseline and after 30 days of exposure.

The results of the study demonstrated that NR-recipient patients showed significantly increased brain NAD levels, an altered brain metabolic pattern, and decreased levels of inflammatory cytokines in the cerebrospinal fluid. Moreover, patients experienced a mild but significant clinical improvement, and this correlated with the change in the brain's metabolic pattern.

"These findings, particularly the effects on pro-inflammatory cytokines and clinical symptoms, are clearly supportive of carrying out larger trials in Parkinson disease patients," said Dr. Rudolph Tanzi, Vice Chair of Neurology and Co-Director of McCance Center for Brain Health at Massachusetts General Hospital, Joseph P. and Rose F. Kennedy Professor of Neurology at Harvard Medical School, and member of the ChromaDex Scientific Advisory Board.

These promising results suggest that NR supplementation may have neuroprotective potential by targeting various

processes implicated in the development of PD, however further research needs to be conducted on its use as a potential therapeutic strategy.

For additional information on the science supporting Niagen® visit [www.chromadex.com](http://www.chromadex.com).

## About ChromaDex:

ChromaDex Corp. is a global bioscience company dedicated to healthy aging. The ChromaDex team, which includes world-renowned scientists, is pioneering research on nicotinamide adenine dinucleotide (NAD+), levels of which decline with age. ChromaDex is the innovator behind NAD+ precursor nicotinamide riboside (NR), commercialized as the flagship ingredient Niagen®. Nicotinamide riboside and other NAD+ precursors are protected by ChromaDex's patent portfolio. ChromaDex maintains a website at [www.chromadex.com](http://www.chromadex.com) to which ChromaDex regularly posts copies of its press releases as well as additional and financial information about the Company.

## Forward-Looking Statements:

This release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities and Exchange Act of 1934, as amended, including statements related to results of the pre-clinical and clinical NR studies, their significance and the potential of NR as a promising alternative for PD therapy. Statements that are not a description of historical facts constitute forward-looking statements and may often, but not always, be identified by the use of such words as "expects," "anticipates," "intends," "estimates," "plans," "potential," "possible," "probable," "believes," "seeks," "may," "will," "should," "could" or the negative of such terms or other similar expressions. More detailed information about ChromaDex and the risk factors that may affect the realization of forward-looking statements is set forth in ChromaDex's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, ChromaDex's Quarterly Reports on Form 10-Q and other filings submitted by ChromaDex to the SEC, copies of which may be obtained from the SEC's website at [www.sec.gov](http://www.sec.gov). Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and actual results may differ materially from those suggested by these forward-looking statements. All forward-looking statements are qualified in their entirety by this cautionary statement and ChromaDex undertakes no obligation to revise or update this release to reflect events or circumstances after the date hereof.

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