

Can delayed/extended-release methylphenidate allow for once daily evening dosing in ADHD?

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A new three-part study showed that a delayed-release, extended-release form of methylphenidate could be given to adults in the evening with or without food and would not exert any clinically meaningful effect for at least 10 hours after administration. These positive findings suggest that HLD200 could provide a novel and more flexible alternative to treating attention deficit hyperactivity disorder (ADHD) in children compared to the currently used immediate-release methylphenidate. The design of each study and the intriguing results are reported in the *Journal of Child and Adolescent Psychopharmacology*.

The article is entitled "Pharmacokinetics of HLD200, a Delayed-Release and Extended-Release Methylphenidate: Evaluation of Dose Proportionality, Food Effect, Multiple-Dose Modeling, and Comparative Bioavailability with Immediate-Release Methylphenidate in Healthy Adults." Coauthors Bev Incledon, Ph.D., Ironshore Pharmaceuticals & Development, Inc., (Grand Cayman, Cayman Islands) and colleagues from University of Maryland School of Pharmacy (Baltimore, MD) and Highland Therapeutics, Inc. (Toronto, Canada) set up a series of studies to be able to evaluate different doses of HLD200, the potential impact of taking the drug in a fasted state or following a high-fat evening meal, and the effects, if any, of a low-fat versus a medium-fat breakfast. The authors also evaluated different dosing strategies.

"For many parents whose children with ADHD are very restless and impulsive from the moment they awake, mornings are very difficult before their first dose of medicine starts to work. This new formulation may potentially correct these early morning problems," says Harold S. Koplewicz, MD, Editor-in-Chief of the *Journal of Child and Adolescent Psychopharmacology* and President of the Child Mind Institute in New York.



More information: Tao Liu et al, Pharmacokinetics of HLD200, a Delayed-Release and Extended-Release Methylphenidate: Evaluation of Dose Proportionality, Food Effect, Multiple-Dose Modeling, and Comparative Bioavailability with Immediate-Release Methylphenidate in Healthy Adults, *Journal of Child and Adolescent Psychopharmacology* (2019). DOI: 10.1089/cap.2018.0122

Provided by Mary Ann Liebert, Inc

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