

## 130

### Consistent Efficacy of DR/ER-MPH on Early Morning Functioning in Children With ADHD: Analysis of BSFQ Item Ratings From a Pivotal Phase 3 Trial

Timothy E. Wilens, MD<sup>1</sup>; Steven R. Pliszka, MD<sup>2</sup>; Valerie K. Arnold, MD<sup>3</sup>; Andrea Marraffino, PhD<sup>4</sup>; Norberto J. DeSousa, MA<sup>5</sup>; Bev Incedon, PhD<sup>5</sup>; F. Randy Sallee, MD, PhD<sup>5</sup>; and Jeffrey H. Newcorn, MD<sup>6</sup>

<sup>1</sup> Massachusetts General Hospital, Boston, Massachusetts, USA

<sup>2</sup> The University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

<sup>3</sup> University of Tennessee Health Science Center, Memphis, Tennessee, USA

<sup>4</sup> Meridien Research, Inc., Maitland, Florida, USA

<sup>5</sup> Ironshore Pharmaceuticals & Development, Inc., Camana Bay, Grand Cayman, Cayman Islands

<sup>6</sup> Mount Sinai Medical Center, New York, New York, USA; Onbehalf of the HLD200-108 Study Group

**ABSTRACT:** Objective: In a phase 3 trial of children with attention-deficit/hyperactivity disorder (ADHD), DR/ER-MPH (formerly HLD200), a delayed-release and extended-release methylphenidate, improved ADHD symptoms and reduced at-home early morning and late afternoon/evening functional impairment versus placebo. The validated Before School Functioning Questionnaire (BSFQ), a key secondary endpoint, was used to measure early morning functional (EMF) impairment. This post hoc analysis evaluated the effect of DR/ER-MPH versus placebo on individual BSFQ item scores from baseline.

**METHOD:** Data were analyzed from a pivotal, randomized, double-blind, multicenter, placebo-controlled, parallel-group, phase 3 trial of DR/ER-MPH in children (6-12 years) with ADHD (NCT02520388). Using the 20-item BSFQ, investigators evaluated EMF impairment by scoring each item on a severity scale of 0 to 3, with 0 denoting “no impairment” and 3 denoting “severe impairment”. For post hoc analyses, treatment comparisons between DR/ER-MPH and placebo at endpoint were determined by using least squares mean changes from baseline on individual BSFQ items score derived from an analysis of covariance (ANCOVA) model with treatment as the main effect, and study center and baseline score as covariates.

**RESULTS:** Of 163 children enrolled across 22 sites, 161 were included in the intent-to-treat population (DR/ER-MPH, n = 81; placebo, n = 80) and 138 completed the study. The mean DR/ER-MPH dose achieved after 3 weeks of treatment was 68.1 mg. Following 3 weeks of treatment, DR/ER-MPH significantly reduced mean BSFQ item scores from baseline on 18 out of 20 items versus placebo (P < 0.001 in 8 items [listening, following directions,

attention, forgetfulness, talkativeness, silliness, time awareness, getting to school]; P < 0.01 in 7 items [overall organization, being quiet, distraction, interrupt/blurt out, breakfast, hygiene, independence]; P < 0.05 in 3 items [procrastination, hyperactivity, awaiting turn]). Only “dressing” and “misplacing/losing items” showed no significant between-group differences (P = 0.171 and P = 0.175, respectively). Distributions of the severity ratings for each item will be presented. No serious TEAEs were reported; TEAEs were consistent with methylphenidate.

**CONCLUSIONS:** Post hoc analyses revealed that DR/ER-MPH significantly reduced 18 out of 20 individual BSFQ item scores versus placebo in children with ADHD. These findings are worth further exploration.

**FUNDING ACKNOWLEDGEMENTS:** Ironshore Pharmaceuticals & Development, Inc.

## 132

### Effects of Valbenazine on Depression and Suicidality in Adults With Tardive Dyskinesia: Pooled Results of 3 Double-Blind, Placebo-Controlled Trials

Gary Remington, MD<sup>1</sup>; Dao Thai-Cuarto, PharmD<sup>2</sup>; Joshua Burke, MS<sup>3</sup>; Scott Siegert, PharmD<sup>4</sup>; and Grace S. Liang, MD<sup>5</sup>

<sup>1</sup> Senior Scientist in the Campbell Family Mental Health Research Institute and Chief of the Schizophrenia Division at the Centre for Addiction and Mental Health, Toronto, Ontario, Canada

<sup>2</sup> Director of Clinical Drug Safety, Neurocrine Biosciences, Inc., San Diego, CA

<sup>3</sup> Director, Biostatistics and Data Management, Neurocrine Biosciences, Inc., San Diego, CA

<sup>4</sup> Executive Director, Head of Medical Affairs, Neurocrine Biosciences, Inc., San Diego, CA

<sup>5</sup> Medical Director, Clinical, Neurocrine Biosciences, Inc., San Diego, CA

**ABSTRACT:** Study Objectives: Valbenazine (INGREZZA; VBZ) is a novel and highly selective vesicular monoamine transporter 2 (VMAT2) inhibitor that is approved for the treatment of tardive dyskinesia (TD) in adults. The randomized, double-blind, placebo (PBO)-controlled trials of VBZ evaluated the treatment of TD in patients with a primary psychiatric diagnosis (schizophrenia/schizoaffective disorder or mood disorder) while on concomitant psychiatric medications to manage these disorders. Since treatment-emergent depression and suicidal ideation/behavior are important clinical concerns in psychiatric patient populations, data from these trials were analyzed to assess the effects of once-daily VBZ on depression and suicidality.