

baseline on individual PREMB-R AM/PM 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 individual item scores from baseline versus placebo on all PREMB-R AM items (all  $P \leq 0.002$ ; “getting out of bed”, “getting ready”, and “arguing or struggling in the morning”). Additionally, DR/ER-MPH significantly reduced mean individual item scores from baseline on 5 out of 8 PREMB-R PM items ( $P < 0.01$  in 2 items [“sitting through dinner” and “playing quietly”] and  $P < 0.05$  in 3 items [“inattentive/distractible”, “transitioning between activities”, and “settling down/getting ready for bed”]). There was a trend towards a reduction on 2 other items of the PREMB-R PM ( $P < 0.09$ ). Distributions of the 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 all PREMB-R AM item scores, including “getting out of bed”, and many PREMB-R PM items, including “getting ready for bed” in children with ADHD. These findings are worth further exploration.

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### Effect of DR/ER-MPH on Caregiver-Reported ADHD Symptom Improvement in Children With ADHD and Caregiver Strain: Results From a Phase 3 Trial

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**ABSTRACT:** Objective: Evening-dosed DR/ER-MPH (formerly HLD200), a delayed-release and extended-release methylphenidate, was designed to provide efficacy upon awakening and through the evening. The objective was to evaluate whether treatment with DR/ER-MPH in children with attention-deficit/hyperactivity disorder (ADHD): (1) improves caregiver-rated ADHD symptoms, and (2) reduces caregiver strain, versus placebo.

**METHOD:** Caregiver-rated ADHD symptoms (Conners' Global Index-Parent [CGI-P]) and caregiver strain (Caregiver Strain Questionnaire [CGSQ]) were assessed as secondary endpoints following 3 weeks of treatment in a 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 10-item CGI-P, parents rated their child's ADHD symptoms on a 4-point scale (0 = never/seldom; 3 = very often/frequently). Caregivers also rated the impact of caring for a child with emotional and behavioral challenges on the 21-item CGSQ (5-point scale: 1 = not at all; 5 = very much). A reduction on individual item and total scores for both measures indicated an improvement.

**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 after 3 weeks of treatment was 68.1 mg. Mean CGI-P scores at baseline and CGSQ scores at screening (ie, before washout of prior ADHD therapy) were comparable for both DR/ER-MPH (CGI-P: 22.8, CGSQ: 54.5) and placebo (CGI-P: 21.8; CGSQ: 54.9) groups. After 3 weeks of treatment, caregivers of children on DR/ER-MPH reported significant reductions in CGI-P scores versus those on placebo (least-squares [LS] mean: 12.3 vs 17.4;  $P < 0.001$ ). Additionally, there was a significant reduction in CGSQ scores after 3 weeks of treatment with DR/ER-MPH versus placebo (LS mean: 41.2 vs 49.1;  $P < 0.001$ ). Post hoc analyses on the effect of DR/ER-MPH versus placebo on individual items of CGI-P and CGSQ, and the two subscales of CGI-P will be presented. No serious TEAEs were reported and all TEAEs were consistent with those of MPH.

**CONCLUSIONS:** Caregivers reported significant improvements in their child's ADHD symptoms and these improvements coincided with reductions in caregiver strain after 3 weeks of treatment on evening-dosed DR/ER-MPH versus placebo.

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