
Post HOC Analyses of the Efficacy of Lisdexamfetamine Dimesylate in Adults Previously Treated with Attention Deficit/hyperactivity Disorder Medication.

L. Adler¹, J. Wu², M. Madhoo³, **B. Caballero**⁴

¹Departments of Psychiatry and Child and Adolescent Psychiatry, New York University School of Medicine, New York, USA ; ²Global Biostatistics, Shire, Wayne, USA ; ³Global Medical Affairs, Shire, Wayne, USA ;

⁴Global Clinical Development, Shire, Zug, Switzerland

Introduction

Symptoms of attention-deficit/hyperactivity disorder (ADHD) appear in childhood, but often persist into adulthood. The prodrug lisdexamfetamine dimesylate (LDX) is an effective once-daily treatment for the symptoms of ADHD in children, adolescent and adults.

Objectives

To evaluate *post hoc* the impact of ADHD medication history on the efficacy of LDX in adults.

Methods

In this phase 4, double-blind, dose-optimized study, patients aged 18–55 with ADHD and impaired executive function were randomized (1:1) to LDX or placebo for 10 weeks. Patients well controlled on current ADHD medication with acceptable tolerability were ineligible. Self-reported, lifetime ADHD medication histories were recorded at screening. Investigator-rated ADHD Rating Scale IV with adult prompts (ADHD-RS-IV-Adult) was a secondary efficacy measure. Primary efficacy and safety outcomes have been published (J Clin Psychiatry 2013;74:694–702).

Results

Baseline characteristics were similar across treatment arms and previous ADHD medication subgroups. Differences between LDX and placebo in mean change from baseline to endpoint in ADHD-RS-IV-Adult total score were observed in the overall study population (n=154; -11.1 [95% confidence interval: -14.96, -7.32]; effect size, 0.9), treatment-naïve patients (n=80; -11.4 [-16.81, -5.96]; 0.9) and patients previously treated with: any ADHD medication (n=74; -10.9 [-16.50, -5.30]; 0.9), methylphenidate (n=40; -9.9 [-17.44, -2.45]; 0.9), amphetamine (n=38; -13.8 [-20.86, -6.75]; 1.3) and atomoxetine (n=21; -8.4 [-21.97, +5.26]; 0.6).

Conclusions

In these *post hoc* analyses, the response to LDX was similar in the overall study population and subgroups of patients categorized by ADHD medication history.

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