Review of Lisdexamfetamine Dimesylate in Adults with Attention-Deficit/Hyperactivity Disorder.

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Abstract

Lisdexamfetamine dimesylate (LDX) is the first prodrug stimulant used for the treatment of attention-deficit/hyperactivity disorder (ADHD) dosed once daily. Due to its long-acting properties, LDX remains pharmacologically inactive until an enzymatic process predominantly associated with red blood cells converts it to the active ingredient, d-amphetamine and the amino acid lysine. The efficacy of LDX over placebo has been demonstrated in several studies in adults with moderate to severe ADHD with significant improvements noted in ADHD rating scales, Clinical Global Improvement scores, and assessments of executive function, for all doses of LDX (30-70 mg daily). Lisdexamfetamine dimesylate has demonstrated efficacy at 14 hours post dose in adults and may be used as a long-acting stimulant for managing ADHD symptoms, which may extend late into the day. Lisdexamfetamine dimesylate has demonstrated a safety profile consistent with long-acting stimulants use.