Long-Term, Open-Label, Safety Study of Edivoxetine Monotherapy in Children and Adolescents with Attention-Deficit/Hyperactivity Disorder


Journal of Child and Adolescent Psychopharmacology. April 2017

ABSTRACT

Objective:
The purpose of this study was to assess the long-term safety and tolerability of edivoxetine, a selective norepinephrine reuptake inhibitor, which was being developed as monotherapy in pediatric attention-deficit/hyperactivity disorder (ADHD).

Methods:
This was an open-label study of edivoxetine once daily dosing (0.1–0.3 mg/kg) as treatment for ADHD in children (6–11 years) and adolescents (12–17 years) to assess safety for up to 5 years. The safety assessments included the incidence of adverse events, vital signs, electrocardiograms, laboratory tests, percentile changes in weight, height, and body mass index, and Tanner staging. Efficacy of treatment with edivoxetine was also assessed using the Attention-Deficit/Hyperactivity Disorder Rating Scale-Version IV-Parent Reported: Investigator Scored (ADHDRS-IV) and Clinical Global Impressions-ADHD-Severity (CGI-ADHD-S).

Results:
A total of 267 children and adolescents were enrolled and 20 completed the 5-year study. Most of the participants were male (70.4%) and white (67.4%), and the mean age was 11.6 years. Two hundred three participants (76.9%; N = 264) experienced at least one adverse event. Treatment-emergent adverse events reported in >10% of participants were headache, vomiting, nausea, and upper respiratory tract infection. Serious adverse events (SAEs) were reported by seven participants (2.7%) during study treatment periods, and one participant was diagnosed with suspect epilepsy during the follow-up period after discontinuation of edivoxetine.

Conclusion:
Long-term open-label treatment with edivoxetine as monotherapy in children and adolescents with ADHD revealed a safety profile that was consistent with its pharmacological effects on norepinephrine transmission and with that reported in short-term studies of edivoxetine. The study was terminated early due to slow enrollment and the very low number of 5-year completers. Lilly is not proceeding with further development of edivoxetine, as announced in 2013.