INTRODUCTION. Attention deficit hyperactivity disorder (ADHD) is a disorder of a biological origin affecting the neurodevelopment of the brain. It is estimated that 3-7% of school-age children present ADHD. The most commonly used pharmacological treatments are amphetamines and methylphenidate (MPH). Although response rates to MPH are high, full remission rates reach only 56%. The 25% of patients who do not respond to MPH would show a response to other stimulants and vice-versa.

AIMS. To clinically evaluate patients by detecting inadequate responses and the efficacy of a change to lisdexamfetamine dimesylate (LDX).

PATIENTS AND METHODS. The study was prospective and observation-based. Inadequate responses were considered to be those that presented non-coverage or no effect. The Attention-Deficit/Hyperactivity Disorder Rating Scale IV (ADHD-RS-IV) and Clinical Global Impression-Severity (CGI-S) assessment scales were used for the clinical assessment, together with the Weiss Functional Impairment Rating Scale (WFIRS) and the Child Health and Illness Profile (CHIP-AE). Data regarding adverse side effects were also collected.

RESULTS. Forty-one patients met criteria for inadequate response to treatment: 13.6 ± 3.4 years, 54.6 ± 13.2 kg, 158.5 ± 17.2 cm and body mass index of 20.9 ± 3.5 kg/m². Reasons for change (non-exclusive): non-coverage (76%), lack of intensity of effect (68%) and presence of adverse side effects with the previous medication (16%). The mean score both at baseline and at nine months, on the ADHD-RS, was 24.54 ± 6.3 versus 12.01 ± 3.2 (p < 0.01), respectively, and for the CGI-S values were 5.09 ± 0.5 versus 2.91 ± 0.8 (p < 0.01), respectively. The safety profile coincided with that of other stimulant-based treatments for ADHD.

CONCLUSIONS. When the response to MPH presents non-coverage or lack of effect, changing to LDX has proved to be effective, with an improvement in 86.7% of cases, which is similar to that of other studies. It is therefore a good therapeutic option in these patients.