

**Lisdexamfetamine dimesylate (Elvanse Adult®) ▼**  
**For Attention Deficit Hyperactivity Disorder (ADHD) in Adults**

**Commissioning Statement**

Fylde and Wyre Clinical Commissioning Group has agreed to fund the prescribing of Lisdexamfetamine dimesylate (Elvanse Adult®) ▼ for Attention Deficit Hyperactivity Disorder (ADHD) in Adults.

Lisdexamfetamine dimesylate is a licensed long acting alternative to the other treatment options available e.g. dexamfetamine and methylphenidate. It is recommended as an option for use as part of a comprehensive treatment programme for attention deficit/hyperactivity disorder (ADHD) in adults. Based on clinical judgment, patients should have ADHD of at least moderate severity. Treatment must be under the supervision of a specialist in behavioural disorders and follow the pathway of the ADHD adult service. Primary care can continue the prescribing under the Shared Care Guideline.

**This medicine is classified as AMBER 1 for this indication**

**Evidence:**

- Clinical evidence to support the use of lisdexamfetamine in the treatment of ADHD in adults derives from four double-blind, randomised, placebo-controlled studies and one open-label, single-arm study.
- A short-term forced dose-escalation study and a follow-up long-term open-label single-arm study evaluated safety and efficacy of lisdexamfetamine in adults with moderate to severe ADHD, aged 18 to 55 years old (baseline post-washout ADHD rating scale [ADHD-RS] score of  $\geq 28$ , based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision® (DSM-IV-TR®) criteria).
- Following a washout period of any other stimulant, patients were randomised in a 2:2:2:1 ratio to four weeks treatment with lisdexamfetamine 30 mg once daily (n=119), 50 mg once daily (n=117), 70 mg once daily (n=122), or placebo (n=62). In the follow-up study all patients (n=349) were allocated to lisdexamfetamine 30 mg once daily which was increased according to response over four weeks, and then continued for up to 11 months in the long-term maintenance phase.
- The primary outcome for both studies was the clinician-determined change in ADHD-RS total score from baseline to endpoint (the last post-randomisation treatment week for which a valid score was obtained) using adult DSM-IV-TR® prompts.
- In the short-term study there was a significantly greater decrease (improvement) from baseline to endpoint in the ADHD-RS total score for each of the lisdexamfetamine treatment groups compared with placebo in the intention-to-treat population ( $p < 0.0001$ ). Least square (LS) mean ( $\pm$ standard error) adjusted changes in scores in the placebo, lisdexamfetamine 30 mg, 50 mg and 70 mg groups, were; -8.2 ( $\pm 1.43$ ), -16.2 ( $\pm 1.06$ ), -17.4 ( $\pm 1.05$ ), and -18.6 ( $\pm 1.03$ ) respectively.
- The longer-term study also demonstrated a significant decrease in ADHD-RS total score from baseline to endpoint with a mean (standard deviation [SD]) change of -24.8 (11.7) ( $p < 0.0001$ ).

- In the short-term study (n=296) those who previously received lisdexamfetamine, had a mean (SD) improvement in ADHD-RS total score of 62% (25.1) vs. those treated with placebo of 55% (32.0).
- A two-way crossover study initiated adults with ADHD on lisdexamfetamine 30 mg once daily (n=142) and titrated them to the optimum tolerable dose of 30 mg, 50 mg or 70 mg once daily over a 4 week open label period. Patients were then entered into a two-week double-blind crossover phase and were randomised to seven days treatment with their optimised dose of lisdexamfetamine (n=127), followed by seven days treatment with placebo.
- The study found that lisdexamfetamine was associated with a significantly higher average post-dose total permanent product measure of performance (PERMP) score (LS mean [SD] 312.7 [94.42]) compared to placebo (287.6 [81.45]); LS mean difference 23.4 (95% confidence interval [CI]: 15.6 to 31.2), (p<0.0001).
- In a phase IV withdrawal study, following at least six months stable treatment, patients were continued with their assigned dose of lisdexamfetamine (n=56) or switched to placebo (n=60) in a six-week double-blind randomised withdrawal phase.
- The primary outcome was the proportion of treatment failures (defined as ≥50% increase (worsening) in the ADHD-RS with adult prompts total score and a two point or greater increase (worsening) in CGI-Severity (CGI-S) score) at endpoint (up to six weeks) in the double-blind randomised withdrawal phase. A significantly lower percentage of treatment failures occurred at endpoint in the lisdexamfetamine group (8.9% [5/56]) compared with the placebo group (75% [45/60]) (p<0.0001).
- A further phase IV study evaluated the safety and efficacy of lisdexamfetamine on executive function (EF) behaviours via self- and informant-reporting. Adults with ADHD were randomised to ten weeks treatment with placebo (n=80) or lisdexamfetamine (n=79) and titrated over four weeks to the optimum dose (30 mg, 50 mg or 70 mg daily).
- A statistically significant reduction (improvement) was achieved in the primary outcome; patient-reported behaviour rating inventory of executive function adult version (BRIEF-A) global executive composite (GEC) test-score in the lisdexamfetamine group compared with the placebo group from baseline to endpoint (LS mean -11.2; 95% CI: -15.9 to -6.4; p<0.0001).
- SMC states that other data were also assessed but remain commercially confidential.

For details around the colour classification system please refer to the website of the Lancashire Medicines Management Group at: <http://www.lancsmmg.nhs.uk/>