

## OSMOTIC-RELEASE ORAL SYSTEM METHYLPHENIDATE (OROS-MPH) TREATMENT OF ADULT PRISON INMATES WITH ADHD: A RANDOMISED CONTROLLED TRIAL WITH OPEN-LABEL EXTENSION

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**Introduction:** ADHD is associated with pervasive cognitive, emotional and functional impairments and increased rates of coexisting disorders. Epidemiological studies indicate 25-45% of prison inmates to have ADHD. However, ADHD is often unrecognised in prison inmates and stimulant treatment was not previously evaluated in this group.

**Objectives:** Provide effective treatment for prison inmates established with ADHD.

**Aims:** Evaluate efficacy and long-term effectiveness of osmotic-release oral system methylphenidate (OROS-MPH) in adult male long-term prison inmates with ADHD.

**Methods:** A 5-week randomised, double-blind, placebo-controlled, fixed-dose (72 mg/d) trial was conducted in 30 prison inmates with ADHD and coexisting disorders. In a following 47-week open-label extension (OLE), flexible-dosing OROS-MPH was provided alongside psychosocial interventions within a high-security Swedish prison. Primary outcome was change in ADHD symptoms after 5 weeks (CAARS: O-SV). Secondary outcomes included self-reported ADHD symptoms, global severity, global functioning, cognition, motor activity, institutional behaviour and quality of life.

**Results:** OROS-MPH was highly effective and overall safe, both in the short-term relative to placebo (Cohen's  $d=2.17$ ; NNT=1.1), and in the long-term when provided alongside psychosocial interventions. Treatment continued to improve ADHD symptoms, global functioning, motor activity, cognition, quality of life, and behaviour control over the 47-week OLE. No drug misuse was reported and a majority of participants completed rehabilitation programs.

**Conclusions:** OROS-MPH effectively improved symptoms and functional impairments of ADHD in prison inmates with ADHD. We suggest that OROS-MPH provided alongside rehabilitation programs could be a feasible and effective multimodal intervention for adults with ADHD and coexisting disorders within a prison setting.