# REPURPOSING LOW DOSE LISDEXAMFETAMINE AS AGONIST THERAPY FOR STIMULANT USE DISORDER: A CASE SERIES

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### **Introduction and Aims:**

Lisdexamfetamine is a long acting dopamine and noradrenaline agonist approved for the indication of Attention-Deficit Hyperactivity Disorder in Australia. There is evidence it may minimise symptoms of Binge Eating Disorder and Narcolepsy. As a prodrug, it has less abuse liability due to the rate limiting hydrolysing reaction in red cells to produce Dexamphetamine. Lisdexamfetamine is currently being examined as a potential agonist therapy for Methamphetamine Dependence/Stimulant Use Disorder.

## **Design and Methods:**

Patients were retrospectively selected from a cohort of inpatients and outpatients from a single hospital site. Selection criteria were neuroadaptation with Methamphetamine, and the use of pharmacotherapy with Lisdexamfetamine.

### Results:

10 patients with Stimulant Use Disorder were treated with low dose Lisdexamfetamine, with varying degrees of clinical success. Any positive treatment effect was lost immediately after cessation of therapy. Illicit drug monitoring and treatment compliance were problematic. All of the patients selected for inclusion in this case series had Attention-Deficit Hyperactivity Disorder according to DSM-5 criteria.

# **Discussion and Conclusions:**

In Stimulant Use Disorder, Lisdexamfetamine may mitigate harm by virtue of blocking cravings and urges for further Methamphetamine consumption. Preferential responder profiles may include patients with antedating eating disorders and attentional disorders. Further research is required to determine any potential role of Lisdexamfetamine as agonist therapy for Stimulant Use Disorder, although there is a possibility that compliant and motivated patients may benefit.

## **Disclosure of Interest Statement:**

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