## P-44 - THE ROLE OF IMPULSIVITY AND COGNITIVE FUNCTIONING IN ADDICTION: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL OF MODAFINIL FOR ALCOHOL DEPENDENCE

L.Joos<sup>1</sup>, L.Schmaal<sup>2</sup>, A.E.Goudriaan<sup>2</sup>, D.Veltman<sup>2</sup>, W.van den Brink<sup>2</sup>, B.G.C.Sabbe<sup>1</sup>, G.Dom<sup>1,3</sup>

<sup>1</sup>Medical Sciences, Collaborative Antwerp Psychiatric Research Institute (CAPRI), University of Antwerp, Wilrijk, Belgium, <sup>2</sup> Psychiatry, Amsterdam Institute for Addiction Research, University of Amsterdam, Amsterdam, The Netherlands, <sup>3</sup>Psychiatric Center Alexian Brothers, Boechout, Belgium

**Introduction:** There is growing evidence that cognitive deficits play an important role in the development, course and relapse of substance use disorders. In particular, functions that involve control over one's own behaviour (impulsivity), and over behaviour when confronted with motivationally relevant drug cues (craving) are related to relapse in recent studies. So far, pharmacological manipulations of cognitive deficits are rare and relapses after treatment are the rule rather than the exception.

**Objectives:** Therefore, we performed a randomized, double-blind, placebo-controlled trial with modafinil, which is a known cognitive enhancer and a wake-promoting agent.

**Aims:** At first, the interaction between impulse control, overall cognitive functioning, motivational strength of drug cues, and vulnerability to relapse, will be elucidated in order to disentangle new treatment possibilities. Second, the effectiveness of a long term treatment with modafinil on impulse control and relapse will be explored.

**Methods:** 83 abstinent alcohol dependent inpatients were randomized to a single morning dose of modafinil (300mg/d), or matching placebo, for 10 weeks. Both neurocognitive tests (on impulsivity, craving and overall cognitive functioning) and self-report questionnaires were administered before, during and after treatment. Patients were followed up 6 months after treatment, to measure relapse rate. Primary outcome variables are test performance, craving ratings and relapse. **Results:** Data will be unblinded after finalizing the follow-up data collection. Therefore, results will be available from January 2012.

**Conclusions:** It is expected that modafinil improves cognitive functioning, increases time to first relapse and reduces relapse rates and relapse severity, compared to placebo.