drink alcohol. Furthermore, stress and anxiety can also elicit craving and increase the motivation to drink alcohol.
**Objectives:** Further understanding the risk of relapse would be crucial for the treatment of AUD. Thus, the aim of this study was to identify clusters within a sample of patients with AUD based on the different factors of relapse risk, and to compare these clusters based on the severity of alcohol use disorder, craving and anxiety.
**Methods:** The sample consisted of 114 patients diagnosed with AUD at the Department of Psychiatry, University of Szeged, Hungary between November 2022 and January 2024. The level of AUD was measured with the Alcohol Use Disorders Identification Test (AUDIT) (subscales: consumption, dependence, harmful consequences of alcohol use) and the Severity of Alcohol Dependence Questionnaire (SAD-Q) (subscales: physical withdrawal signs, affective withdrawal signs, withdrawal relief drinking, quantity and frequency of alcohol consumption, rapidity of reinstatement of withdrawal symptoms following abstinence). State and trait anxiety were measured with the State-Trait Anxiety Inventory (STAI-S, STAI-T). Craving was measured with the Multidimensional Alcohol Craving Scale (MACS). The risk of relapse was measured with the Alcohol Relapse Risk Scale (ARRS) (subscales: stimulus-induced vulnerability (SV), emotionality problems (EP), compulsivity for alcohol (CA), negative expectancy for alcohol (NE), positive expectancy for alcohol (PE), insight into mental condition (IM)).
**Results:** Two-step cluster analysis was performed with the six subscales of the ARRS as predictor variables. A two-cluster solution was found, in which SV proved to be the most important predictor. Independent sample t-tests for the two clusters revealed significant between-cluster differences on all subscales except for 'lack of negative expectancy for alcohol' ($p \geq 0.001$). Independent sample t-tests and Chi-square tests were performed to compare the two clusters on the basis of age, sex, the severity of AUD, craving and anxiety. Significant differences were found in almost all factors except for age, sex and the 'rapidity of reinstatement of withdrawal symptoms following abstinence' subscale of the SAD-Q ($p \geq 0.01$).
**Conclusions:** The first cluster with more defined signs for the risk of relapse was characterised by more severe AUD, craving, state and trait anxiety compared to the second cluster with milder signs for the risk of relapse. These results suggest that the risk of relapse is a complex phenomenon, which can be identified through the evaluation of several different factors, which may influence treatment choices.

**Disclosure of Interest:** None Declared

## EPP350

## Effect of CYP2C19*17 gene polymorphism on plasma levels of diazepam and nordiazepam in Turkish patients with Alcohol Withdrawal Syndrome

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**Introduction:** Alcohol withdrawal syndrome (AWS) is not a common medical condition in general population however it affects patients with alcohol use disorder (AUD) and causes severe complications when diagnosed late or left untreated. Diazepam is a benzodiazepine, which is used to treat various diseases such as insomnia, anxiety, muscle spasm, pain and AWS. Compared to other benzodiazepines, diazepam is more efficient to prevent delirium and decrease withdrawal due to its long half-life. Diazepam is metabolised to its main metabolite nordiazepam with the enzymes expressed by *CYP2C19* and *CYP3A4* genes. It has been reported that metabolic activity of the enzymes encoded by *CYP2C19* gene may be varied due to genetic polymorphisms leading a change in the efficiency of treatment via effecting the plasma level of drugs metabolised by *CYP2C19*.
**Objectives:** The aim of this study is to investigate whether *CYP2C19*17* gene polymorphism has an impact on plasma levels of diazepam and nordiazepam in the Turkish patients with AWS and under oral diazepam treatment.
**Methods:** The study included 50 male patients who were in withdrawal state and taking diazepam therapy. *CYP2C19*17* polymorphism was determined by PCR-RFLP method. Plasma levels of diazepam (DZP) and nordiazepam (NDZP) were detected by HPLC.
**Results:** Genotype frequencies were calculated as 66% for CC, 30% for CT and 4% for TT. Dose-normalized DZP and dose-normalized NDZP values were 0.049 µg/ml per mg/day and 0,056 µg/ml per mg/day, respectively. No statistical significance was observed in the levels of normalized DZP and NDZP when CC and CT+TT genotypes were compared ($p$= 0.073 and $p$=0.282, respectively).
**Conclusions:** The effect of CYP2C19*17 polymorphism on the plasma levels of DZP and NDZP following long term oral diazepam to treat patients with AWS was determined for the first time. With the help of current study, first data on Turkish population was obtained and may be useful for personalized therapy in the future.
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## EPP351

## Age-Related Cognitive Decline in Substance Use Disorder: Impact of Prolonged Substance Consumption

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**Introduction:** The consumption of alcohol, cannabis, cocaine, or heroin causes alterations in the central nervous system, affecting mood, perception, and behaviour. Despite the harmful effects of these substances, they remain widely used. Younger individuals tend to consume cannabis and cocaine, while older adults more commonly use alcohol and prescription medications. Ageing brings