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**Introduction:** Cognitive impairments represent core features in schizophrenia, impact the functional capacity of patients, and are highly predictive of poor functional outcomes. There is a huge unmet need for improvement of these impairments, and the development of new therapies is conditioned by understanding underlying pathophysiology that is not clear enough. Kynurenic acid (KYNA) is the major metabolite of kynurenine (KYN) pathway (KP) of tryptophan (TRP) degradation, which acts as the inhibitor of NMDA and  $\alpha 7$ -nicotinic receptors that are crucial for cognitive functioning. Excessive antagonism of these receptors by KYNA is hypothesized to contribute to cognitive deficits while data indicate that proinflammatory cytokines activate this TRP catabolic cascade.

**Objectives:** The objective of this study was to assess correlation between blood levels of TRP, KYNA, KYN, KYN/TRP ratio, IL-8, IFN- $\gamma$ , IL-1 $\beta$  and cognitive functioning in clinically stable schizophrenia patients.

**Methods:** We measured plasma concentrations of TRP, KYNA, KYN, IL-8, IFN- $\gamma$ , IL-1 $\beta$  and conducted assessment of cognitive functioning in domains of verbal memory, working memory, attention and processing speed, motor speed, verbal fluency, and executive functions using Brief Assessment of Cognition in Schizophrenia Scale (BACS) in 64 clinically stable schizophrenia (SCZ) patients. Patients were matched by age, sex and body mass index and exclusion criteria included obesity class 2 or higher, any concomitant organic mental or neurological disorder, acute or chronic inflammatory disease, and use of immunomodulatory drugs or psychoactive substances.

**Results:** A significant positive correlation was observed between BACS verbal fluency subtest score and kynurenine levels ( $p < 0.05$ ), along with a significant negative correlation with IL- $\beta$  levels ( $p < 0.05$ ). There were no other significant correlations of blood levels of TRP, KYNA, KYN, KYN/TRP ratio, IL-8, and IFN- $\gamma$ , and cognitive impairments in domains of verbal memory, working memory, attention and processing speed, motor speed, and executive functions.

**Conclusions:** While the relationship between KP metabolites and cognitive functioning in schizophrenia in domains of verbal and working memory is more reported, specific correlation between KYN levels and verbal fluency observed in our study is less studied and understood. Furthermore, negative correlation between IL-1 $\beta$  levels and verbal memory performance is a valuable finding and can be further explored in the context of suggested detrimental role of IL-1 $\beta$  on hippocampal neurogenesis. Our findings should be interpreted cautiously and corroborated in larger studies with parallel measurement of preferal and central levels of analyzed parameters since there are data that suggest that peripheral concentrations of TRP, KYNA, KYN, IL-8, IFN- $\gamma$ , IL-1 $\beta$  do not mirror those in the central nervous system.

**Disclosure of Interest:** None Declared

## Psychopharmacology and Pharmacoeconomics

### EPP324

#### Evaluating the in-hospital initiation of 6-monthly paliperidone palmitate: a retrospective study

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**Introduction:** Long-acting injectable antipsychotic treatments (LAIA) have marked a significant therapeutic advancement. For certain patients, clinical necessity may dictate that the most suitable treatment option is to initiate a 6-monthly LAIA earlier than standard protocols recommend. This can involve transitioning directly from an oral antipsychotic regimen or accelerating the switch from a monthly LAIA, a process known as alternative initiation.

**Objectives:** The objective of this study is to describe our experience with alternative initiation protocols for 6-monthly paliperidone palmitate (PP3M) in psychotic patients, as implemented at Torre Vieja University Hospital.

**Methods:** This retrospective descriptive study utilized a sample selected through non-probabilistic consecutive sampling over a 27-month period ( $n=43$ ). The study included patients who initiated 6-monthly paliperidone palmitate treatment through an alternative approach between May 2022 and August 2024 at Torre Vieja University Hospital. All alternative initiations were performed in acute patients, who were decompensated at the time of initiating PP6M treatment, with very low therapeutic adherence. A descriptive analysis was conducted, with mean and standard deviation calculated for quantitative variables, and frequencies (N) and percentages calculated for categorical variables.

**Results:** Over the 27-month duration of this study, PP6M was administered to 43 patients ( $n=43$ ). The average age was 41 years ( $SD \pm 14.07$ ). 53.49% ( $n=23$ ) were male and 46.51% ( $n=20$ ) female. The mean duration of disease progression was 6.67 years ( $SD \pm 7.16$ ). 20.9% ( $n=9$ ) of the patients were using substances with abuse potential. The diagnoses were distributed as follows: schizophrenia (32.56%), unspecified psychosis (30.23%), bipolar disorder (11.63%), delusional disorder (11.63%), borderline personality disorder (9.30%), and schizoaffective disorder (4.65%).

A total of 24 alternative initiations were made from oral antipsychotics, 15 from monthly paliperidone palmitate (PP1M), and 4 from aripiprazole LAIA 400 mg/month. During the 27-month study period, there were 4 hospital admissions and 7 visits to the emergency department. Treatment adherence after the alternative initiation of PP3M was 72%, with patients completing all administrations on the scheduled dates. 74% of the patients are in outpatient follow-up. One patient experienced extrapyramidal symptoms as a side effect.

**Conclusions:** The present study indicates that there is a subset of patients who may benefit from an alternative initiation with PP6M, potentially enhancing adherence due to the simplified administration regimen. Initiating PP6M as an alternative, whether transitioning from oral antipsychotics, from PP1M or from another LAIA, could be an effective approach for managing decompensated patients with very low therapeutic adherence, demonstrating excellent tolerability and improved adherence.

**Disclosure of Interest:** None Declared