# EPP0705

# Clinical relevance of Paliperidone Palmitate threemonth intramuscular injection formulation: an Italian Real-World, Retrospective, one-year Mirror Image Study

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**Introduction:** Paliperidone Palmitate 3-month (PP3M) formulation, introduced in Italy since 2017, is an effective and safety therapeutic option for patients with schizophrenia, clinically stable with 1-month formulation (PP1M). Only a few "Real World" studies investigated the clinical relevance of PP3M and the longterm clinical and health resource utilization outcomes.

**Objectives:** The aim of this retrospective, mirror image study was to evaluate the efficacy of PP3M in terms of continuity of care and number of hospitalizations.

**Methods:** Fifty outpatients treated with Paliperidone Palmitate (PP) were recruited from a Community Mental Health Centre (CMHC) in Milan. Statistical analysis were conducted with SPSS 26. Frequencies of hospitalization 6 months before and after the start of PP3M were compared using the McNemar test, setting the significance to p<0.05.

**Results:** This study involved 34 patients (68%) treated with PP1M and 16 (32%) treated with PP3M. The median time interval between PP1M and PP3M was 14 months. After the switch to PP3M, 69% of patients continued to visit the CMHC with an unchanged frequency (50% once/month, 6% more than once/month), while 31% with a decreased frequency (once/3 months). No patient increased the frequency of CMHC visits or started visiting it discontinuously. 44% of subjects had had at least one hospitalization prior to the switch and no hospitalizations after (p=0.016). Moreover, no patients showed increased hospitalizations

**Conclusions:** In this study PP3M clinical relevance was confirmed comparing pre-initiation and post-initiation 6-months time intervals: hospitalizations number significantly decreased, while the continuity of care was preserved. Further studies on a greater sample are necessary to support these preliminary data.

Disclosure: No significant relationships.

**Keywords:** one-year Mirror Image Study; clinical relevance; psychopharmacology; Paliperidone Palmitate 3-month formulation

## **EPP0704**

# Valproic acid-induced hyperammonemic encephalopathy (VIHE) in a patient with Bipolar disorder: A case report and literature review.

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**Introduction:** Valproic acid (VPA) is a valuable treatment for bipolar disorder, schizoaffective disorder, and agitation<sup>1</sup>. However, potential side-effects include sedation, headaches, tremors, ataxia, gastrointestinal issues, neural tube defect, <sup>3</sup> and mild hyperammonemia even in normal liver function test <sup>1</sup> and VPA level.

**Objectives:** To illustrate clinical presentation of VIHE and provide literature review on post-VIHE treatment options.

**Methods:** A 59-year-old male with PMH of Diabetes Mellitus, Hypertension, Hyperlipidemia, LVH, COPD, s/p CVA, and PPH of schizoaffective disorder, bipolar type. Patient stable on VPA 1250mg daily and Olanzapine 5mg daily for >2years until recent manic decompensation resulting to up-titration of VPA to 1500mg H.S. Thereafter, he presented with altered mental status, with VPA level (111.4 ug/ml), hyponatremia (119 mmol/L) and hyperammonemia (84 umol/L). Subsequently, admitted as a case of VIHE and hyponatremia.

**Results:** VPA has shown to cause hyperammonemia alone or when combined with antipsychotics<sup>6</sup>. VIHE reported in up to 47.7% of patients on VPA<sup>1</sup>, but symptomatic in approximately 10% of patients on VPA with blood ammonia level about 2-fold the normal range<sup>8</sup>. VIHE presents with confusion, ataxia, blurred vision, delirium, and seizures<sup>3</sup>. Treatment options include VPA discontinuation, switch to other mood stabilizers (lithium carbonate, lamotrigine), utilization of medications to lower blood ammonia levels (Lactulose, Rifaximin/Neomycin),<sup>3</sup> antipsychotic monotherapy, and supplements (Levocarnitine or Carglumic acid) in the prevention, maintenance, and treatment of VIHE. These supplements can be added to VPA if the benefits of re-initiating or continuing VPA outweighs the risk<sup>3</sup>.

Conclusions: Further research is needed.

Disclosure: No significant relationships.

**Keywords:** VIHE - Valproic acid induced hyperammonemic encephalopathy; bipolar disorder; VPA - Valproic acid; Schizoaffective disorder

# EPP0705

# Efficacy and tolerability of brexpiprazole in patients with psychotic and mood disorders: a pilot study

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Introduction: Brexpiprazole is a novel antipsychotic drug. It exerts antagonistic activity at the serotonin 5HT2A, 5HT2B, 5HT7 and

noradrenaline alpha 1b/2c receptors; it also acts as partial agonist of serotonin 5HT1 and dopamine D2, D3 receptors. Brexpiprazole is approved for the treatment of schizophrenia and as an add-on therapy for major depression.

**Objectives:** This pilot study aims at exploring efficacy and tolerability of Brexpiprazole in a small sample of patients diagnosed with either a psychotic or a mood disorder.

**Methods:** This observational study was conducted at our Acute Psychiatric Inpatient Unit. We included 7 patients (5 males, 2 females) hospitalized between 2020 and 2021, diagnosed with schizophrenia spectrum disorders or mood disorders with psychotic symptoms confirmed by Mini International Neuropsychiatric Interview. Patients who participated signed an informed consent. Information concerning diagnosis, demographic characteristics (age, sex, education, marital status) and pharmacological therapy were collected examining clinical records. The average lenght of hospitalization was 13.4 days. Psychopathology was assessed by means of the PANSS and the severity of the illness was evaluated with CGI severity scale (CGI-S), both on admission and discharge. We also administered the UKU scale to evaluate the tolerability profile.

#### **Results:**

	Mean (Standard	Deviation)		
Age	33.6 (14.7)	Sex	5 M; 2 F	
Education years	11.7 (4.1)	Married	2	
Days of hospitalization	13.4 (2.4)	Unmarried	5	
CGI-S admission	4.8(1)			
CGI-S discharge	2.1 (1.3)			
PANSS Total score	88.3 (18.4)			
PANSS Positive score	23.1 (5.9)			
PANSS negative score	16.9 (5.8)			
PANSS general score	48.3 (10.3)			
PANSS Total score	50.4 (3.9)			
PANSS Positive score	12.7 (3.2)			
PANSS negative score	10.9 (2.79			
PANSS general score	26.9 (3.8)			
UKU scale score	0 (0)			

Figure 1. Demographic characteristics and psychopathological evaluations

Patient 1	Brexpiprazole 4 mg; Flurazepam 30 mg
Patient 2	Brexpiprazole 3 mg; Valproic acid 1500 mg; Carbolithium 900 mg
Patient 3	Brexpiprazole 4 mg; Quetiapine prolonged-release 600 mg; Lithium sulphate 124.5 mg; Mirtazapine 30 mg
Patient 4	Brexpiprazole 4 mg; Flurazepam 30 mg
Patient 5	Brexpiprazole 4 mg; Gabapentin 1800 mg; Lithium sulphate 166 mg; Mirtazapine 30 mg; Lorazepam 5 mg
Patient 6	Brexpiprazole 4 mg; Haloperidol 2 mg; Lorazepam 4 mg
Patient 7	Brexpiprazole 2 mg; Valproic acid 800 mg; Vortioxetine 20 mg; Pregabalin 150 mg; Flurazepam 30 mg

Figure 2. Brexpiprazole dosage and concomitant psychopharmachotherapy for each patient/die

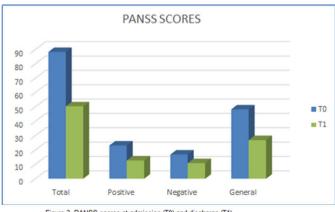


Figure 3. PANSS scores at admission (T0) and discharge (T1)

Results can be seen in figures 1, 2, 3

**Conclusions:** Our study found a significant improvement in both positive and negative symptoms, with good tolerability. Limitations of our study are: small sample size and limited period of observation. These premises suggest that further research is needed in order to elucidate the exact mechanisms underlying Brexpiprazole's action and the possible implication in mood disorders.

Disclosure: No significant relationships.

Keywords: Brexpiprazole; psychopharmacology; Mood disorders; PSYCHOTIC DISORDERS

## **Forensic Psychiatry**

## **EPP0707**

# Clinical Factors Associated with Violence Behavior in Persons with Schizophrenia Spectrum Disorders: A Case Control Study

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**Introduction:** Study of clinical risk factors of violent behavior in persons with schizophrenia still remains actual in research literature. This is especially important for Georgia as ongoing mental health reform aims to shift from institutional care to community based services, which in turn requires better understanding and management of risk of aggressive behavior in the community.

**Objectives:** To study clinical risk factors for violence in persons with schizophrenia spectrum disorders (SSD) who have committed a violent act in the past and in persons with SSD who have not committed a violent act.

**Methods:** The survey design was retrospective case-control study. Case-control groups were defined according to the outcome (violent act in the past). We studied the impact of clinical symptoms on each person using standardized scales for assessment of the positive and negative symptoms and global level of functioning. Data were collected through patient interviews and medical records.

**Results:** Study results showed that diagnosis of delusional disorder and ideas of persecution were associated with increased risk of violence (28.7% cases versus 7.5% controls); Hallucinations if presented were less severe compared with controls (2.1% vs. 7.5%). Negative symptoms were marked in cases but more severe in controls. Of cases 43,6% showed serious impairment of global functioning (vs 25,5% controls).

**Conclusions:** Study findings confirmed that a focus on improving controllable clinical factors, including global level of functioning, might help to prevent aggressive behavior. It is discussed that developments and implementation needs-specific services to reduce risk of violence behavior should be prioritized by mental health national strategy plan.

**Disclosure:** No significant relationships. **Keywords:** schizophrénia; violence behavior