# Descriptive study about the use of cariprazine in an acute, dual diagnosis and long-stay psychiatric units in Barcelona

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## Introduction

Cariprazine is a novel drug approved by the European Medicines Agency (EMA) in July 2017(1). It is a dopamine D3 and D2 receptor partial agonist, with a preference of D3 over D2. Its mean half-life is 1 to 3 weeks. Its dose range is 1.5 to 6 mg. The only indication the EMA authorises is for schizophrenia but in the United States it is also indicated for acute manic/mixed episodes in bipolar I disorder (1). It is metabolic-friendly, does not increase prolactin and does not affect QTc interval (2). It is supposed to be well tolerated, improves negative symptomatology and may help with stimulants and cannabis craving.

The clinical experience in Spain is still scarce. In Centre Emili Mira (CAEM), Barcelona (Catalonia, Spain) it was not until March 2020 that patients received the first cariprazine doses during hospitalization.

### Aims of study

To assess the prescribing pattern of cariprazine and the clinical profile of the patients receiving it in our clinical practice.

#### **Methods**

Observational descriptive and retrospective study in 3 psychiatric units (acute, dual pathology and long-term stay) from March 2020 until May 2021 in CAEM, Barcelona.

The sample is composed of all patients in treatment with cariprazine at the time of the study analysis.

Data collection was carried out through the clinical history and data analysis using SPSS 25.0.

#### Results

We identified 34 patients on cariprazine, 52.9% males, the mean age was 38.1 years (range from 18 to 87 years) and 26,5 % had cardiovascular risk factors. The average duration of the psychiatric disease was 10.5 years.

The most common diagnostics were schizophrenia (n:10), bipolar disorder (8) and schizoaffective disorder (6). More than half of our patients had a comorbid substance use disorder (64.7%), 31% were poly-consumers. The most prevalent drug was cannabis (72,7%), followed by cocaine and amphetamines.

The average dose of cariprazine was 4.2 mg. 58,8% received cariprazine added to other antipsychotics (olanzapine and clozapine were the most common combinations).

No serious adverse events were reported. The most common side effect was akathisia.

85% of the patients that were on cariprazine treatment were not readmitted to the hospital within the next 6 months of cariprazine initiation.

### **Conclusions**

Cariprazine may be well tolerated and effective for psychotic and bipolar disorders.

The use of cariprazine in our center follows the published recommendations, being the dose administered within the therapeutic range.

We also want to highlight its novel use in dual patients, due to a high-affinity D3 partial agonist that may prevent relapse to cocaine reducing its reward effect.

It is also an opportunity for the treatment-resistant schizophrenia and partial response to clozapine who benefit from combination with cariprazine, enhancing the antipsychotic effect and also reducing the adverse metabolic effects of clozapine. The majority of patients who have maintained treatment with cariprazine have not been readmitted in the following 6 months. The clinical challenge is to encourage patient compliance.

However, the scarcity of our data does not allow us to reach more formal conclusions. Further research is needed.

## **References**

- [1] https://www.ema.europa.eu/en/documents/overview/reagila-epar-summary-public\_es.pdf
- [2] Campbell RH, Diduch M, Gardner KN, Thomas C. Review of cariprazine in management of psychiatric illness. Ment Health Clin. 2018 Mar 23;7(5):221-229. doi: 10.9740/mhc.2017.09.221. PMID: 29955527; PMCID: PMC6007710.

#### **Disclosure statement:**



