## NEWER LONG-ACTING INJECTABLE ANTIPSYCHOTICS IN THE TREATMENT OF SCHIZOPHRENIA: AN OBSERVATIONAL COMPARATIVE STUDY OF AVAILABLE FORMULATIONS

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Long-acting injectable (LAI) formulations of newer antipsychotics have been reported to significantly increase long-term adherence to treatment in patients with schizophrenia, reduce risks of relapse and rehospitalization, and improve global functioning. Aim of this prospective, open label and observational study was to compare the efficacy and tolerability profile of the available formulations of newer, second-generation LAI antipsychotics in a naturalistic setting.

Patients affected by schizophrenia who started a treatment with a new LAI antipsychotic, i.e., risperidone LAI, olanzapine pamoate, paliperidone palmitate or aripiprazole LAI at different units of psychiatry in the area of Messina, from September 2015, were considered for the study. Patients underwent clinical and psychopathological evaluation at baseline and after 3, 6 and 12 months. Routine laboratory analyses and ECG were performed. Primary endpoint was discontinuation rate for any reason within 1-year treatment, while secondary endpoints were discontinuation rate for adverse effects and lack of efficacy.

To date, 98 patients have been included, 57 males and 41 females, age ranging from 22 to 68 years, median age of 42. Of the patients, 55 received paliperidone palmitate (50-150 mg every 4 weeks), 25 aripiprazole LAI (300-400 mg every 4 weeks), 9 risperidone LAI (25-50 mg every 2 weeks), and 9 olanzapine pamoate (300-405 mg every 4 weeks). During the first year of treatment, discontinuation rate was 30.9% among patients treated with paliperidone palmitate, 32.0% in those receiving aripiprazole LAI, 33.3% in those on risperidone LAI and 77.7% in those on olanzapine pamoate, with a ststistically significant difference (p<0.05) among groups. Extrapyramidal adverse effects and hyperprolactinemia were the most frequent causes of discontinuation in patients receving paliperidone palmitate, while weight increase was responsible for most of the dropouts associated with aripiprazole LAI. In the olanzapine pamoate group, one patient developed a a symptomatology consistent of a postinjection delirium sedation syndrome.

These preliminary data indicate that, with the exception of olanzapine pamoate, treatment with new LAI antipsychotics is associated with a favorable efficacy and tolerability profile, as documented by the relatively low rate of patients who discontinued treatment due to lack of efficacy or adverse effects. In our sample, the use of olanzapine pamoate was limited to few patients, presumably because it requires a risk management plan including supervision of the patient for 3 hours post-injection.