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MEETING ABSTRACT

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# Effects of atypical antipsychotics on neurocognition in euthymic bipolar patients

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## Background

The effect of pharmacological treatment on cognition is still uncertain due to an insufficient number of studies examining this issue.

## Materials and methods

A total of 114 subjects were included in the study. Of 79 DSM-IV euthymic bipolar patients, 63 were treated with one atypical antipsychotic, quetiapine (n = 12), olanzapine (n = 22), or risperidone (n = 29). Sixteen patients were drug-free. The four groups were compared with a sample of drug-naïve patients and healthy control group (n = 35) on several clinical and neuropsychological variables, especially on the domains of attention, verbal memory and executive functions.

## Results

Bipolar patients taking one of the three antipsychotics presented with dose-independent significant deficits in most cognitive tasks compared to healthy controls. After several head-to-head group comparisons, the patients receiving quetiapine showed a better performance in learning task, short-term memory and recognition task assessed with the California Verbal Learning Test and verbal fluency (p < 0.05).

## Conclusions

Our results confirm previous studies of cognitive deficits in bipolar disorder. Untreated euthymic patients showed better cognitive performance than patients on atypical antipsychotics. Some iatrogenic-pharmacological effect, therefore, can not be excluded but quetiapine seemed to

be less associated with impairment in measures of verbal memory than olanzapine or risperidone. We suggest to use drugs in bipolar disorder with a lower risk of cognitive side-effects. However, randomized controlled trials are urgently needed to give a definite answer to this critical problem.

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## References

1. Martinez-Aran A, Vieta E, Reinares M, et al: Cognitive function across manic or hypomanic, depressed, and euthymic states in bipolar disorder. *Am J Psychiatry* 2004, **161**:262-270.
2. Torres JJ, Boudreau VG, Yatham LN: Neuropsychological functioning in euthymic bipolar disorder: a meta-analysis. *Acta Psychiatr Scand Suppl* 2007, **17**:26.
3. Balanza-Martinez V, Rubio C, Selva-Vera G, et al: Neurocognitive endophenotypes (endophenocognotypes) from studies of relatives of bipolar disorder subjects: a systematic review. *Neurosci Biobehav Rev* 2008, **32**:1426-1438.
4. Tabarés-Seisdedos R, Balanza-Martinez V, Sanchez-Moreno J, et al: Neurocognitive and clinical predictors of functional outcome in patients with schizophrenia and bipolar I disorder at one-year follow-up. *J Affect Disord* 2008, **109**:286-299.

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