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► **To cite this version:**

Carla Torrent, Anabel Martinez-Arán, Claire Daban, Benedikt Amann, Vicent Balanzá-Martinez, et al.. Effects of atypical antipsychotics on neurocognition in euthymic bipolar patients. 1st International Congress on Neurobiology and Clinical Psychopharmacology and European Psychiatric Association Conference on Treatment Guidance, Nov 2009, Thessaloniki, Greece. BioMed Central, 9 (Suppl 1), pp.S175, 2010, Annals of General Psychiatry. <10.1186/1744-859X-9-S1-S175>. <inserm-00663897>

**HAL Id: inserm-00663897**

**<http://www.hal.inserm.fr/inserm-00663897>**

Submitted on 27 Jan 2012

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MEETING ABSTRACT

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# Effects of atypical antipsychotics on neurocognition in euthymic bipolar patients

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From 1<sup>st</sup> International Congress on Neurobiology and Clinical Psychopharmacology and European Psychiatric Association Conference on Treatment Guidance Thessaloniki, Greece. 19-22 November 2009

## 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.

## Acknowledgements

This study was supported by grants from the Fundacio Marató de TV3 (2510/01), FIS n° PI080180, and the CIBERSAM.

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Published: 22 April 2010

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doi:10.1186/1744-859X-9-S1-S175

Cite this article as: Torrent et al.: Effects of atypical antipsychotics on neurocognition in euthymic bipolar patients. *Annals of General Psychiatry* 2010 **9**(Suppl 1):S175.

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