

## ANALYSIS OF THE EFFECT OF MEMANTINE IN REDUCING CLINICAL SYMPTOMS IN PATIENTS WITH MODERATE TO SEVERE ALZHEIMER'S DISEASE

**E. Moruzzi**

Psychiatric Voila Hospital, Campina, Romania

**Introduction:** Alzheimer's disease is a progressive neurodegenerative disorder in which the patient experiences progressive loss of cognitive and functional abilities and concomitant behavioural disturbances. Memantine, a moderate affinity, uncompetitive N-methyl-d aspartate (NMDA) receptor antagonist, is approved for the treatment of moderate to severe Alzheimer disease.

The NMDA receptor subtype of glutamate receptors is involved in regulating synaptic plasticity and likely plays a role in learning and memory. The stimulation of this receptor can result in excessive intracellular calcium concentrations and might possibly contribute to both acute and chronic forms of neurodegeneration. Memantine has been shown to improve symptoms and reduce the rate of clinical deterioration among patients with moderate to severe Alzheimer's disease.

**Methods:** A safety analysis of Alzheimer's disease patients from four randomized placebo controlled, double-blind memantine dementia studies included 50 and 50 memantine and placebo treated patients. A vast majority of the patients received memantine 20mg/day for a duration of at least 12 weeks, with most receiving treatment for 28 weeks. Active and placebo groups were well matched demographically.

**Conclusions:** Overall, memantine showed statistically significant benefits on global and statistically significant benefit on cognition. Memantine consistently benefited patients in all stages of Alzheimer's disease and was well-tolerated.