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### P12.03

Intramuscular olanzapine: efficacy and safety in acutely agitated patients with dementia

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To investigate the efficacy and safety of rapid-acting intramuscular olanzapine in treatment of agitation in inpatients with dementia. Patients were randomized to receive up to 3 intramuscular injections within 24 hours: either 2.5-mg olanzapine (Olz2.5, n=71), 5.0-mg olanzapine (Olz5.0, n=66), 1.0-mg lorazepam (Lzp, n=68), or placebo (n=67).

Two hours after injection, olanzapine and lorazepam improved scores significantly more than placebo on the PANSS Excited Component subscale (PANSS-EC) and Agitation-Calmness Evaluation Scale (ACES). Olz5.0 and Lzp also improved scores more on the Cohen-Mansfield Agitation Inventory. At 24 hours, both Olz groups continued to show statistical superiority over placebo on the PANSS-EC, but Lzp did not. Simpson-Angus and MMSE scores did not change significantly from baseline. Sedation (ACES >=8), adverse events, and laboratory analytes were not different from placebo for any treatment. QTc interval changes were not significantly different from placebo for any of the active treatments. No clinically and statistically significant changes were seen in any other vital signs, including orthostasis.

These results suggest that rapid-acting intramuscular injection of olanzapine may provide substantial benefit in treating dementia-related agitation.

### P12.04

The DemTect®: a very sensitive screening instrument for mild dementia

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**Objective:** The Mini Mental State Examination (MMSE) has been criticized for lack of sensitivity in mild dementia. We compared the sensitivity of the MMSE and a new screening instrument, the DemTect®, in patients with mild vascular dementia (VD) and Alzheimer's dementia (AD).

**Method:** 31 control subjects, mean (±SD) age 65.0±10.6yrs, 28 VD patients (71.0±10.6yrs), and 36 AD patients (72.4±6.7yrs) with mild dementia according to the Clinical Dementia Rating scale were assessed with the DemTect® and the MMSE. Discriminant analyses were performed.

**Results:** Both dementia groups scored significantly (p<.001) worse than the controls in the DemTect® (mean [±SD] scores [maximum 18]: controls 16.1±1.3, VD 8.4±3.8, AD 5.6±2.6) and MMSE ([maximum 30]: controls 29.6±0.5, VD 25.1±4.7, AD 25.4±3.6). The sensitivity of the DemTect® was 95.2% for the VD and 95% for the AD patients, whereas the sensitivity of the MMSE was 58.3% for the VD and 74.5% for the AD patients. Specificity was >95% for both tests.

**Conclusion:** Compared to the MMSE, the DemTect® is a much more sensitive screening instrument in mild forms of vascular and Alzheimer's dementia.

### P12.05

Efficacy of quetiapine in the treatment of behavioral symptoms in dementia

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Many patients with dementia, during the course of illness, shows psychiatric and behavioral symptoms. The most important are: delusions, allucination, aggressivity, irritability, depression, alteration of sleep/wake cycle and wandering. These symptoms, frequently are present in the early stage of illness and provoke distress to caregivers. The aim of our study is evaluate the frequency and severity of psychiatric and behavioral symptoms in 30 patient with mild and moderate Alzheimer's disease before and after treatment with 50- 200 mg/die of quetiapine. The behavioral symptoms are evaluate with the Neuropsychiatric Inventory and Behave-AD before the treatment and after 2, 4, 6 and 8 weeks. At the end of the study the behavioral and psychiatric symptoms are significantly reduce. This study confirm the efficacy of quetiapine in the treatment of behavioral disturbance in Alzheimer's disease. This finding is important, because a reduction of psychiatric symptoms in patient with dementia improve the quality of life and reduce the caregiver's distress.

### P12.06

Cerebrospinal fluid 24S-hydroxycholesterol is increased in Alzheimer's disease compared to healthy controls

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**Introduction:** Experiments in cell cultures indicate that accumulation of cholesterol in hippocampal neurons results in an accelerated cleavage of APP into amyloidogenic components. Cholesterol is converted to 24S-hydroxycholesterol to be eliminated from the cerebrospinal fluid (CSF). To address potential effects of circulating plasma cholesterol on CSF 24S-hydroxycholesterol levels only patients and controls with cholesterol levels in the normal range were included.

**Method:** We investigated CSF concentrations of 24S-hydroxycholesterol in a group of 14 AD patients and 10 age-matched healthy controls without any cognitive deficits nor psychiatric or neurological disorders who showed normal plasma cholesterol levels in a range of 150–230 mg/dl.

**Results:** We found significantly elevated 24S-hydroxycholesterol CSF but not plasma levels in AD patients compared to healthy controls.

**Conclusion:** Our results demonstrate CSF 24S-hydroxycholesterol is increased in AD. This effect does not seem to be confounded by plasma cholesterol levels, since the latter did not significantly differ between groups.