

prospectively (2 years). Results presented in this report were based on data from patients with at least 12 months of available data in the Netherlands.

Results: There are 190 patients currently enrolled in the Netherlands and 118 patients have at least 12 months of available data. Of the 118 patients, the majority were male (62.7%) with a mean age of 37.7 ± 11.5 years and a mean time since schizophrenia diagnosis of 11.1 ± 21.5 years. The main reasons for switching to RLAI were lack of compliance (42.4%), adverse events (25.4%) and lack of efficacy (24.6%) with previous therapy. At 12 months, 66.9% of patients were still on RLAI treatment. Of the patients who discontinued RLAI, the mean time to discontinuation was 157.8 ± 76.5 days. Mean CGI-S score significantly improved from 4.05 ± 1.14 at baseline to 3.15 ± 1.38 at 12 months ($p < 0.001$). Additionally, the mean GAF score significantly improved from 43.8 ± 12.0 at baseline to 55.2 ± 14.7 at 12 months ($p < 0.001$).

Conclusion: These interim results showed that treatment with RLAI in patients with schizophrenia was associated with significant improvements in disease severity and functioning.

P0278

Patient and physician satisfaction with risperidone long-acting injection: 18-month interim results from the electronic schizophrenia treatment adherence registry in Belgium

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Objectives: To evaluate patient and physician satisfaction with risperidone long-acting injection (RLAI) in patients with schizophrenia enrolled in the electronic Schizophrenia Treatment Adherence Registry (e-STAR) in Belgium.

Methods: e-STAR is an ongoing, international, prospective, observational study of patients with schizophrenia who start RLAI during their routine clinical management. Treatment satisfaction was assessed by the patient and physician on a 5-point scale from 'very good' to 'very bad'.

Results: 135 patients with mean age 40.9 ± 14 years and duration of illness 9.5 ± 9.2 years initiated treatment with RLAI, followed-up for at least 18 months were included in this analysis. At baseline, only 29.2% of patients expressed "good" or "very good" satisfaction while 21.1% of them expressed "bad" or "very bad" with their previous treatment. Similarly at baseline, 38.2% of physicians reported "good" or "very good" level of satisfaction and 14.6% rated their satisfaction as "bad" or "very bad" at that time. After initiation of RLAI, both patient and physician satisfaction with treatment improved dramatically. At 18 months, 76.5% of patients were satisfied ('good' or 'very good') with RLAI treatment and only 2.4% felt 'bad' and none reported 'very bad'. Physicians also expressed satisfaction with RLAI with 82.1% of them rated it as 'good' or 'very good'. Only one physician reported satisfaction below 'moderate'.

Conclusions: The low levels of patient and physician satisfaction with treatment prior to RLAI are likely to be a key decision driver to change therapy. After starting treatment with RLAI, both patient and physician satisfaction with the treatment substantially improved.

P0279

RGH-188, a d3/d2 dopamine receptor antagonist/partial agonist atypical antipsychotic candidate

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Objectives: RGH-188 is an orally active, potent dopamine D3/D2 receptor antagonist/partial agonist atypical antipsychotic for the treatment of schizophrenia and bipolar mania.

Results: RGH-188 displayed high affinity to human D3 receptors (Ki: 0.085 nM) and approximately six- and thirty-times less affinity to human D2, and 5-HT1A receptors. In various in vitro and in vivo assays RGH-188 behaved either as an antagonist or as a partial agonist on dopamine D3 and D2 receptors.

RGH-188 displayed potent antipsychotic activity (0.1-0.8 mg/kg) in rodent models such as apomorphine-induced climbing, amphetamine- and phencyclidine-induced hypermotility, conditioned avoidance response. It significantly improved the learning performance of rats (0.02-0.2 mg/kg) impaired by scopolamine in a water-labyrinth learning paradigm. RGH-188 showed no EPS liability as it produced no catalepsy up to 100-fold therapeutic range.

In a nonhuman primate positron emission tomography (PET) study using ¹¹C-raclopride RGH-188 occupied striatal D2/D3 receptors in a dose dependent and saturable manner with an ED50 of 7 µg/kg iv. In healthy male subjects multiple administration of 1 mg RGH-188 resulted in over 70% D2/D3 receptor occupancy and the displacement showed correlation with RGH-188 and metabolites plasma levels.

After single administration to healthy volunteers, Tmax for RGH-188 was 3-4 hours and the terminal disposition half-life was 5-6 days. Over the dose range of 0.5-2.5 mg AUC of the parent drug was approximately dose-proportional. Systemic exposure to the pharmacologically active metabolites, desmethyl- and didesmethyl-RGH-188 was 20-30% and 50-200% of that to the parent, respectively.

P0280

Effect of clozapine and its metabolites on the intracellular calcium concentration in cells of isolated rat islets

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Objective: To study the different effects of clozapine and its metabolites on the intracellular Ca²⁺ concentration ([Ca²⁺]_i) in cells of isolated rat islets.

Methods: Under low or high glucose (3.3 mmol/L or 16.7 mmol/L), the cells of isolated rat islets was treated with 1 mmol/L clozapine, desmethyl-clozapine and clozapine N-oxide respectively, blank control group was also set, [Ca²⁺]_i represented by fluorescence intensity was measured by laser scanning confocal microscope after cells were loaded with calcium sensitive fluorescent indicator Fluo-4/AM.

Results: Under low glucose, as compared with the blank control group, inhibitive effect on $[Ca^{2+}]_i$ in cells was found in clozapine group and desmethyl-clozapine group respectively ($P < 0.01$); As compared with the base line (0min), $[Ca^{2+}]_i$ in cells was decreased according to the prolonging of time in clozapine group and desmethyl-clozapine group ($P < 0.05$; 0.01), and the inhibitive effect of clozapine was more intensive than desmethyl-clozapine ($P < 0.01$). Under high glucose, as compared with the blank control group, inhibitive effect on $[Ca^{2+}]_i$ in β -cells was also found in clozapine group and desmethyl-clozapine group respectively ($P < 0.01$); As compared with the base line (0min), $[Ca^{2+}]_i$ in cells was also decreased according to the prolonging of time in clozapine group and desmethyl-clozapine group ($P < 0.05$; 0.01), but the inhibitive effect of desmethyl-clozapine was more intensive than clozapine ($P < 0.01$). However, no effect was found in clozapine N-oxide group under low or high glucose ($P > 0.05$).

Conclusion: Clozapine and desmethyl-clozapine both inhibit $[Ca^{2+}]_i$ in cells of isolated rat islets so that they can inhibit insulin secretion.

Key words: Clozapine; Biotransformation; Islets of Langerhans; Calcium

P0281

Prevalence of neuroleptic-induced movement disorders in psychotic patients within peripheral New Zealand mental health services: Ethnic variation

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Background and Aims: This study investigated the point prevalence of extrapyramidal movement disorders in patients with chronic schizophrenia and related disorders who are currently treated by Northland District Health Board (DHB) mental health services, New Zealand. The study also investigated evidence of variation in the point prevalence of these disorders based on the ethnicity of the patients (indigenous Māori patients and non-Māori).

Methods: 151 patients, who had received antipsychotic medication for 3 months or more, were recruited as participants for the study using randomised computer software. Ethnicity was documented using self-identification. Akathisia was assessed using the Barnes Akathisia Rating Scale (BARS). The Abnormal Involuntary Movement Scale (AIMS) was used to assess tardive dyskinesia and extrapyramidal side effects (EPSE) were assessed by the Simpson-Angus Rating Scale (SAS).

Results: 9.3 % had akathisia using Barnes scale, 43% had Parkinsonian symptoms on SAS scale, and 18.5 % had tardive dyskinesia using AIMS scale. The analysis failed to show any statistically significant differences based on ethnicity (indigenous Māori and non-Māori). $P = 0.284$, 0.176, and 0.201 for Barnes, SAS and Aims respectively.

Conclusions: The findings suggest that the prevalence of neuroleptics-induced movement disorders in psychotic patients within Northland DHB (9%-43%), is similar to the documented international figures. These findings also indicate that there is no significant difference based on ethnicity between Māori and non-Māori in terms of movement disorders profile.

P0282

Association of venous thromboembolism and olanzapine

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Aims: Venous thromboembolism (VTE) has been associated with the diagnosis of a psychiatric disease, as well as with the treatment with psychotropic drugs. Recent reports suggest an association between several atypical antipsychotics agents (eg. olanzapine) and an increased risk for VTE.

Methods: We prospectively analysed and consequently followed-up olanzapine users in a cohort of 138 consecutive patients under 60 years of age (male=72, mean age 45 years) suffering from objectively confirmed VTE over a three-year period (2004 - 2006). Data on known acquired or genetic risk factors for VTE were recorded for each patient.

Results: Four Caucasian patients (one female, three males; mean age 49 years, range 37-55 years) with spontaneous VTE treated with olanzapine were registered. Two patients were obese. The hospitalization was extended in the female patient. We found coagulation abnormalities in all our subjects (elevated levels of factor VIII:C, mild hyperhomocysteinemia, FV Leiden and prothrombin gene G20210A mutations).

Conclusions: These cases indicate that VTE might be associated with the use of olanzapine, at least in the presence of several acquired or inherited risk factors such as immobilization, obesity and disorders of coagulation homeostasis including factor V Leiden, prothrombin gene G20210A mutations, high levels of factor VIII and hyperhomocysteinemia. Subjects treated with olanzapine should be monitored clinically for VTE. Interestingly, in three patients symptoms occurred in the first six months of olanzapine treatment.

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P0283

Atypical antipsychotics in epilepsy

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Epilepsy is a neurological disease, always associating psychiatric troubles; these last ones can be permanent — unstable affect, dementia, or transient — delusions, hallucinations. Treatment in these patients is often difficult, because many antipsychotics may determine motor seizures and/or electroencephalographic changes.

Method: We considered a sample of 35 epileptic patients (21 male and 14 female) with psychotic features, treated with specific antiepileptics and atypical antipsychotics (risperidone, olanzapine, quetiapine). It is well known that DA mediators partially inhibit motor seizures.

Results: During one year, none of our patients related any increase of the frequency of seizures. Also, we did not highlight electroencephalographic changes in this period. Clinically, patients were assessed using PANSS scale.

Conclusion: Atypical antipsychotics can be safely utilized in patients with epilepsy, ascertaining a good control of psychotic features, without worsening neurological symptomatology.