Scale-18 (BPRS-18) at the baseline, 6 weeks, 6 months, and 12 months after the baseline. Changes of BPRS-18 scores across time were analyzed by repeated measure ANOVA. To identify which factor is related to additional improvement with long-term use of clozapine, subjects were classified into 2 groups; clozapine-responsive group and clozapine-resistant group. And logistic regression was performed for two groups.

Results: The analysis revealed the significant improvements of BPRS-18 scores had continued until 6 month, but no significant change found at 12 month. The greatest change of BPRS-18 score was observed at 6 week. Clozapine responsive group (n=14) seemed to have later onset time of the disease, get longer years of education, take more doses of clozapine, and show worse conditions in BPRS-18 at baseline than clozapine resistant group did. However, no significant differences in characteristics were found in logistic regression.

Conclusion: From the results above, some patients with chronic schizophrenia seem to benefit from maintaining clozapine over 6 months. Though no factors predictive of additional efficacy after 6 weeks of clozapine therapy were found, this work suggests it is worth maintaining clozapine over 6 months for some patients if there are no other probable options left in clinical setting.

PM421
Efficacy and safety of brexpiprazole (OPC-34712) in acute schizophrenia: a pooled analysis of two pivotal studies
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Abstract
Background: Brexpiprazole is a serotonin-dopamine activity modulator that acts as a partial agonist at 5-HT1A and dopamine D2 receptors, and an antagonist at 5-HT2A and noradrenaline alpha1B/2C receptors, all at similar potencies. The efficacy, safety, and tolerability of brexpiprazole were evaluated in patients with acute schizophrenia, based on pooled data from two pivotal phase III studies (NCT01396421[1] and NCT01393613[2]).

Methods: In two similarly designed studies, patients with acute schizophrenia were randomly assigned to fixed once-daily doses of brexpiprazole 2mg, 4mg or placebo (an additional treatment group was included in each study [0.25mg and 1.0mg] to evaluate the lower dose range; these doses were not included in the meta-analysis). Primary efficacy endpoint was change in PANSS total score from baseline to week 6; key secondary endpoint was the change in CGI-S score at week 6.

Results: Pooled brexpiprazole 4mg (N=359) and 2mg (N=359) were each superior to placebo (N=358) in change from baseline in PANSS total score at week 6 (least square mean difference [LSMD] to placebo: -6.69, p<0.0001 and -5.46, p=0.0004, respectively). Results of the key secondary endpoint supported the primary results.

Altogether 8.2% (30/364) and 7.1% (26/368) of brexpiprazole-treated patients (4mg and 2mg, respectively) vs 14.7% (54/368) placebo-treated patients discontinued due to adverse events. The incidences of insomnia and agitation in the brexpiprazole treatment groups were similar or lower than with placebo. Akathisia incidences were 6.9% and 4.6% in the brexpiprazole 4mg and 2mg groups, respectively, vs 4.6% with placebo and sedation incidences were 2.7% and 1.6% in the brexpiprazole 4mg and 2mg groups, respectively, vs 0.8% with placebo.

Conclusion: Pooled data from two pivotal studies provide evidence that brexpiprazole is efficacious and safe in treating patients with acute schizophrenia. Both brexpiprazole 2 and 4mg were well tolerated, with notably low levels of akathisia and sedation.

References
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PM422
Creatine Phospho Kinase Elevations with Clozapine
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Abstract
Several previous case reports have shown that clozapine treatment occasionally induces elevation of creatine phosphokinase (CPK) levels. We describe a patient with marked elevations of CPK following initiation of clozapine treatment.

The case was a 41-year-old woman who was first diagnosed with schizophrenia at the age of 25 due to auditory hallucination and delusions of persecution. She was admitted to our psychiatric ward at the age of 41 due to aggressive behaviors and worsening of psychotic symptoms. Treatment with antipsychotics including quetiapine, olanzapine, and aripiprazole as well as electroconvulsvive therapy was ineffective in relieving her symptoms. Clozapine was begun on day 162 of admission at the dose of 12.5mg/day and was gradually increased to 600mg/day by day 232. On day 286, she had a generalized tonic-clonic seizure. Because she had no past history of epilepsy, we suspected clozapine to be the cause of the seizure. Therefore, the dose was decreased to 400mg/day the following day. Her serum levels of CPK were 1079 U/L, 6454 IU/L, and 7509U/L on days 287, 290, and 291, respectively. Clozapine was discontinued on day 291. Serum CPK level decreased to 5224 U/L on day 293. An isoenzyme study showed that the CPK was almost exclusively of skeletal muscle origin. Malignant syndrome was unlikely due to the lack of fever, rigidity, and increased white blood cell count. Because clozapine was the only effective treatment for her psychotic symptoms, clozapine was restarted on day 297. After 56 days of treatment with clozapine 400mg/day, no relapse of seizures or CPK elevation has been observed.

An elevated CPK level is one of the adverse events observed in those prescribed clozapine. However, readministration of clozapine with close monitoring after the occurrence of such adverse effect may be a treatment option.

PM423
Blonanserin augmentation in patients with schizophrenia – who is benefited from blonanserin augmentation?: An open-label, prospective, multicenter study
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PM424

Inpatient mortality and occurrence of re-hospitalization due to cardiovascular diagnoses following acute myocardial infarction in patients with or without serious mental illness

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Abstract

Objective: People with serious mental illness (SMI, including schizophrenia and bipolar disorder) experience adverse health and premature mortality. Higher incidence and/or worse outcome of acute myocardial infarction (AMI) may partly underlie this. We aimed to compare inpatient mortality and occurrence of re-hospitalization due to cardiovascular diagnoses following AMI in patients with and without SMI.

Methods: A historic cohort was conducted using the Taiwan National Health Insurance Research Database. Inpatient mortality and rates of readmission from adult patients with diagnoses of schizophrenia or bipolar disorder that had the first episode of AMI receiving invasive coronary procedures were compared to general population controls. Outcomes of inpatient mortality and occurrence of re-hospitalization were compared in logistic regression models.

Results: A total of 3,361 adult patients with incident AMI between 1996 and 2007 were identified, of whom 591 (17.6%) and 243 (7.2%) had a diagnosis of schizophrenia and bipolar disorder respectively, with 2,527 controls. The mean (SD) age at recorded AMI was 57.1 (15.4) years for people with schizophrenia, 64.2 (15.4) years in people with bipolar disorder, and 66.8 (13.8) years in the comparison cohort. In these patients with AMI, two thirds of the patients were male. Inpatient mortality was 2-folds higher in patients with schizophrenia compared to controls (Odds ratio: 2.79 [1.87 – 4.17], p<0.001); but not in bipolar disorder. There were no significant elevations in the odds of re-admissions due to second AMI episode or due to heart failure in patients with psychiatric diagnosis. However, the odds of re-admission due to cardiogenic shock were significantly higher in psychiatric groups after adjustment (Odds ratios: 2.29 [1.48 – 3.55], p<0.001 for schizophrenia; and 1.80 [1.14 – 2.83], p<0.01 for bipolar disorder).

Conclusion: Schizophrenia was associated with raised risk of inpatient mortality following an AMI episode. However, rate of re-admission due to cardiogenic shock was significantly higher in patients with SMI. Potential public health and clinical implications were discussed.

PM425

Relationship between suicidality and low self-esteem in patients with schizophrenia

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Abstract

Objectives

- Low self-esteem is associated with suicide risk in the general psychiatric population. The aim of this study was to examine associations between suicidality and self-esteem in patients with schizophrenia

Methods

- Subjects meeting DSM-IV diagnostic criteria for schizophrenia were enrolled. Sociodemographic and clinical variables, including previous suicide attempt history, were assessed.