

did not predict admission status. Grandiosity on the PANSS was significantly associated with involuntary admission ( $p < 0.05$ ). Total positive and negative symptom scores and other PANSS subscales did not predict status.

**Conclusion:** Involuntary patients with first episode schizophrenia are older than voluntary patients. Involuntary admission is associated with grandiosity but no other PANSS symptom subscales.

#### P45.14

Association between a functional promoter MAOA variant and schizophrenia

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Disturbed monoamine transmission has been implicated in schizophrenia. We investigated a putative functional promoter polymorphism in the monoamine oxidase A (MAOA) gene in Swedish schizophrenic patients ( $n=133$ ) and control subjects ( $n=377$ ). In men, there was an association between the less efficiently transcribed alleles and schizophrenia ( $\chi^2=4.01$ ,  $df=1$ ,  $p < 0.05$ ). In women no significant differences were found. The present results support the involvement of the MAOA gene in schizophrenic men in the investigated population. The results should be treated with caution because of lack of association in previous studies.

#### P45.15

Association study and meta-analysis of a DRD3 gene Ser9Gly variant and schizophrenia

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There is considerable controversy about a putative association between schizophrenia and a Ser9Gly variant in the first exon of the dopamine D3 receptor gene (DRD3). Two meta-analyses published in 1998 suggested association (odds ratios 1.2). We previously reported lack of association in a Swedish sample. In the present study additional subjects were added to the case-control sample. Patients with schizophrenia ( $n=156$ ) and control subjects ( $n=463$ ) were assessed for the DRD3 Ser9Gly variant. No significant difference between patients and controls were found, but there was an association between DRD3 Ser9Gly variation and response to anti-psychotic drugs. In an updated meta-analysis of all case-control studies comprising more than 8500 subjects the associations between DRD3 Ser9Gly homozygosity ( $\chi^2=6.85$ ,  $df=1$ ,  $p < 0.01$ ; odds ratio 1.13, 95% confidence interval 1.03–1.23) persisted. Reasons for the discrepancies between prior studies are discussed.

#### P45.16

Data mining in schizophrenia in the Human Brain Informatics Project

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In the HUBIN (Human Brain Informatics) project a relational database is established at the Karolinska Institute on human brain data. This study combines molecular genetic, phenotypic, brain imaging (MRI) and environmental data for schizophrenia patients and healthy control subjects resulting in a large number of clinical and biological variables. The project is based on the assumption that cross-domain analyses using data mining approaches can provide new hypotheses much more efficiently if many different domains are investigated on the same subject population. Using a variety of data analysis methods a better understanding of brain structure and function in neuropsychiatric diseases may be achieved. In this study detailed volumetric data from MRI studies are compared with molecular genetic data, disease state and other variables obtained. Several aids are available for deciding the most relevant projections: principal component analysis, dimensionality reduction, mixture identification, autaclass identification etc. The evaluation of these procedures, as well as results obtained, such as a correlation of regional brain volumes, serum enzyme levels and other variables between the different study groups, will be described.

#### P45.17

Pindolol augmentation in aggressive schizophrenic patients

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Treatment of aggression in schizophrenic patients is a major challenge. We sought to examine the efficacy of augmentation of antipsychotic treatment with pindolol in the amelioration of aggression. Thirty male inpatients meeting DSM-IV criteria for schizophrenia, aged 20–65 years involved in 4 or more aggressive incidents in the two previous months, were enrolled in a double-blind crossover study. Aggression was evaluated per incident, with the Overt Aggression Scale (OAS). Positive and Negative Syndrome Scale (PANSS) was administered at baseline, crossover and at endpoint. Patients received either pindolol or placebo augmentation 5mg X 3/day until crossover, then switched. No significant differences were found in the PANSS scores between the placebo and pindolol treatments. OAS scores were significantly reduced for number of aggressive incidents towards objects and other persons during pindolol treatment (0.59 vs 1.46,  $F=6.09$ ,  $p < 0.02$ ; 1.96 vs 3.23,  $F=4.17$ ,  $p < 0.05$  respectively). Similar results were obtained for severity of incidents (0.89 vs 3.58,  $F=19.42$ ,  $p < 0.0001$ ; 2.89 vs 6.85,  $F=10.11$ ,  $p < 0.004$  respectively). Pindolol, with its dual 5HT1A blocking effect ameliorated both number and severity of aggressive acts. Influence on severity may be associated with a 5HT1A antagonistic effect.