*Introduction* Inconsistent data showed that erythrocyte glutathione peroxidase (GPx) activity in schizophrenics is altered.
*Aim* The aim of this study was to evaluate whether some of the demographic, clinical and therapeutic factors had any significant impact on erythrocyte GPx activity in patients with schizophrenia.
*Methods* This study included 68 schizophrenic patients and 59 healthy individuals. GPx activity was tested related to patient age, gender, heredity, the onset of the disease, the duration of the disease, the number of episodes, PANSS scores and drug treatment. GPx activity was determined in erythrocyte hemolysates by Ransel commercially available test.
*Results* Erythrocyte GPx activity was significantly lower in patients with schizophrenia than in controls. Male patients had significantly lower GPx activity in comparison with those in female ones. Heredity negative patients showed significantly lower enzyme activity compared to control values. Significantly lower GPx activity was obtained independently of the onset of the disease. The patient group having more than one psychotic episode also showed significantly lower GPx activity compared to the control group. The disease duration of more than 1 year caused a significant decrease in enzyme activity. There was a significant difference in GPx activity between patients with different PANSS scores. In patients treated with second generation antipsychotics and in those treated with both first and second generation antipsychotics, GPx activity was significantly lower than in controls.
*Conclusion* This study shows that the low erythrocyte GPx activity in schizophrenics depends on patient gender, the number of episodes, disease duration and drug treatment.
*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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**EW508**

## Exploration of the link between clinical judgments and subjective perceptions of clinical change in patients treated for schizophrenia

S. Egger*, S. Vetter, S. Prinz, G. Weniger, M. Müller
*University hospital for psychiatry, ZIP- Rheinau, Zurich, Switzerland*
* *Corresponding author.*

*Introduction* Subjective perceptions of clinical change in patients with schizophrenia are often not congruent to the objective evidence of the same, especially since a lack of insight is part of the symptomatology. However, the exploration of the relationship between clinical judgments from mental health experts and the patients' perception of symptom change is fairly understudied.
*Aims and objectives* This study aimed to investigate the performance of the Positive and Negative Syndrome Scale (PANSS) as a tool for clinical outcome monitoring in schizophrenia in concordance with the change of self-reported psychopathology assessed with the Frankfurt Complaint Questionnaire (FCQ) in patients with a schizophrenia.
*Methods* A consecutive sample of patients admitted to a Swiss psychiatric hospital for schizophrenia was assessed with the FCQ at admission and discharge. The PANSS was rated by the responsible clinicians at admission and discharge. Complete data of admission and discharge were available from approximately 60 cases. Reliable change index (RCI) was calculated to determine a clinically meaningful change based on the PANSS scores. Logistic regression models were conducted to explore the link between RCI levels and the change of self-reported perceptions of psychopathology.
*Results and xonclusions* Our study found no relationship between the change of PANSS and FCQ from admission to discharge in a sample of patients treated for schizophrenia. Therefore, our findings provide evidence for a large discrepancy between the observed clinical severity and the subjective perception of symptoms in individuals with schizophrenia.

*Keywords* Positive and Negative Syndrome Scale; Frankfurt Complain Questionnaire; Schizophrenia; Outcome monitoring; Subjective perception
*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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**EW510**

## Anti-DNA antibodies in the blood of patients with schizophrenia possess DNA-hydrolyzing activity

E. Ermakov[1,*], L. Smirnova[1], L. Sinyanskii[2], D. Dobrygina[2], A. Semke[3], G. Nevinsky[4], V. Buneva[4], S. Ivanova[1]
[1] *Mental health research institute, laboratory of molecular genetics and biochemistry, Tomsk, Russia*
[2] *Siberian state medical universitu, department of neurology and neurosurgery, Tomsk, Russia*
[3] *Mental health research institute, department endogenous disorders, Tomsk, Russia*
[4] *Institute of chemical biology and fundamental medicine, laboratory repair enzymes, Novosibirsk, Russia*
* *Corresponding author.*

*Introduction* Autoantibodies (Abs) to different neuronal receptors and DNA were detected in the blood of patients with schizophrenia. Abs hydrolyzing DNA were detected in pool of polyclonal autoantibodies in autoimmune and infectious diseases, such catalytic Abs were named abzymes.
*Objectives* To investigate the level of anti-DNA antibodies and DNA-hydrolyzing activity of IgG from the serum of patients with schizophrenia depending on leading clinical symptoms.
*Aims* – To measure the concentration of anti-DNA Abs in serum of patients with leading positive and negative symptoms;
– to determine DNA-hydrolyzing activity of IgG.
*Methods* In our study, 51 patients were included. The levels of antiDNA Abs were determined using ELISA. DNA-hydrolyzing activity was detected as the level(%) of supercoiled pBluescript DNA transition in circular and linear forms. Statistical analysis was performed in "Statistica 9.0".
*Results* Anti-DNA Abs of patients with schizophrenia not only bind DNA, but quite efficiently hydrolyze the substrate. IgG of patient with schizophrenia were shown to possess DNA hydrolyzing activity. It should be noted that DNAase activity of IgG in patients with schizophrenia with a negative symptoms was significantly higher, than in patients with positive symptoms (Table 1).
*Conclusions* The data show a correlation with the level of DNase activity and leading symptoms of patients with schizophrenia.

*Table 1* Concentration of anti-DNA Abs and relative hydrolysis of DNA in different groups of patients with schizophrenia.

| Groups of patients | Concentration of anti-DNA Abs U/mL (M ± SD) | | Relative hydrolysis of DNA(%) |
|---|---|---|---|
| | Anti-ssDNA | Anti-dsDNA | |
| Healthy donors ($n$ = 24) | 7.4 ± 2.7 | 6.9 ± 0.9 | 9,1 ± 6,5 |
| Total group of patients with schizophrenia ($n$ = 51) | 6.9 ± 3.7 | 7.4 ± 3.7 | 55.4 ± 32.6* |
| Positive symptoms ($n$ = 25) | 7.2 ± 4.1 | 5.3 ± 3.05 | 43.3 ± 33.1 |
| Negative symptoms ($n$ = 26) | 5.4 ± 2.4* | 7.9 ± 4.5 | 73.3 ± 23.8** |

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**EW511**

## Clinical and functional outcomes of patients with severe schizophrenia undergoing comprehensive treatment: A 6-year follow-up

J.J. Fernandez-Miranda*, S. Diaz-Fernandez
*SESPA, AGCSM-V, Gijon, Spain*
* *Corresponding author.*

*Introduction* To increase treatment compliance and consequently to reach clinical and rehabilitation goals in people with schizophrenia is a main challenge in their treatment.
*Objectives and aims* To know the retention in treatment (and reasons for discharge) of people with severe schizophrenia enrolled in a specific, intensive, comprehensive and community programme for them; and also to know treatment (clinical and functional) outcomes.
*Methods* A 6-year prospective, observational study of patients with severe schizophrenia (ICD 10: F 20; CGI-S $\geq 5$) undergoing specific severe mental illness programme ($n = 200$). Assessment included the Clinical Global Impression-Severity scale (CGI-S), the Camberwell Assessment of Needs (CAN) and the WHO Disability Assessment Schedule (WHO-DAS). Time in treatment and reasons of discharge were measured. Laboratory tests, weight and medications were reported. Hospital admissions were measured.
*Results* CGI at baseline was $5.86 \pm 0.7$. After 6 years 48% of patients continued under treatment (CGI = $4.31 \pm 0.8$; $P < 0.01$); 31% were medical discharged (CGI = $3.62 \pm 1.6$; $P < 0.001$); DAS decreased in the four areas ($P < 0.01$) and also CAN ($P < 0.01$); 7% had moved to other places; 8% were voluntary discharges. Eight patients dead; three of them committed suicide. Forty-five percent of all of them were treated with atypical long-acting antipsychotics, with good tolerability. There were significantly less hospital admissions than during the previous 6 years ($P < 0.001$).
*Conclusions* Retention of severe mentally ill patients with schizophrenia in a specific and intensive care programme was really high; and seemed to help getting in remarkable clinical and functional improvement. Long-acting medication also seemed to be useful on improving treatment adherence, mainly due to their good tolerability.
*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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**EW512**

## Depressive symptoms in a sample of patients diagnosed with schizophrenia

A. Fernandez-Quintana*, M.D.C. García-Mahía
*Clinical university hospital of La Coruña, psychiatry, La Coruña, Spain*
* *Corresponding author.*

*Introduction* Previous studies highlight the difficulty of correctly diagnosing depressive symptoms in schizophrenic patients, as well as the impact on clinical progression among patients who present with both syndromes, worsening treatment adherence and overall prognosis.
*Aims* To determine the prevalence of depressive symptoms in patients diagnosed with schizophrenia. To analyze the relationship of depressive symptoms with other demographic and clinical variables.
*Material and methods* Eighty-four patients diagnosed with schizophrenia according to ICD-10 criteria and treated in an Outpatient Mental Health Clinic were recruited for this study. Symptom severity was assessed using The Positive and Negative Syndrome Scale (PANSS; Kay et al., 1987); classifying patients as positive, negative or mixed schizophrenia subtypes. Data from clinical and sociodemographic variables was obtained from clinical records.
*Results* The mean age was 43.2 years (SD: 10.2). Depression is objectively detected in 10.3% of the sample, and presented as subjective depression in 29.5%. The prevalence of depressive symptoms is higher among women, unmarried patients, lower social classes and patients who met criteria for predominantly positive Schizophrenia subtype. Higher prevalence of depressive symptoms was found in patients with a shorter course of disease.
*Conclusions* Depressive symptoms present with a high prevalence among patients diagnosed with schizophrenia, especially during the early years of the disease. Given the severe impact of depression on both the evolution and prognosis of patients with severe mental illness, screening and early treatment must be carried out.
*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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**EW513**

## Problems in long-term treatment with atypical antipsychotics: hyperprolactinemia

C. Franch[1,*], G. Medina[2], M.D. Ortega[3], M.E. Calzada[1], V. Molina[2]
[1] *Complejo Asistencial Universitario de León, Psiquiatría, Leon, Spain*
[2] *Hospital Clínico Universitario de Valladolid, Psiquiatría, Valladolid, Spain*
[3] *Centro de Salud Mental Cartagena, Psiquiatría, Murcia, Spain*
* *Corresponding author.*

*Introduction* Schizophrenia and other psychotic disorders are associated with high rates of morbidity and mortality, caused by the use of specific treatments as well as health factors directly related to those processes. One of the high-frequency side effects in patients treated with classic and atypical antipsychotics is hyperprolactinemia. It causes alterations in neuroendocrine sphere (amenorrhea, galactorrhea, gynecomastia...), and other mid- and long-term effects (osteoporosis, cardiovascular risk increase and increased risk of developing cancers - specifically in breasts and endometrium).
*Objectives* Check hyperprolactinemia induction by maintained treatment with atypical antipsychotics.
*Methodology* A naturalistic prospective study was conducted following 75 patients on maintenance treatment with a single atypical antipsychotic during 24 months. Anthropometric and laboratory data were collected, along with the presence of different endocrine-metabolic during the 2-year study alterations.
*Results* Changes in prolactin levels were found in a large number of patients, with statistically significant differences between 0 (basal) and 24 months (Basal [M = 26.27; SD = 21], 2 years [M = 38.08, SD = 34.65]; $t = -2.758$; $P = 0.013$], with hyperprolactinemia increasing from 46.6% of patients at baseline to 65.5% at 2 years, mainly with paliperidone and risperidone long acting injection (statistically significant increase in both cases) (Fig. 1).
*Conclusions* Paliperidone and risperidone long acting injectable induce increased prolactin levels in patients in long-term antipsychotic treatment.