

Fig. 1

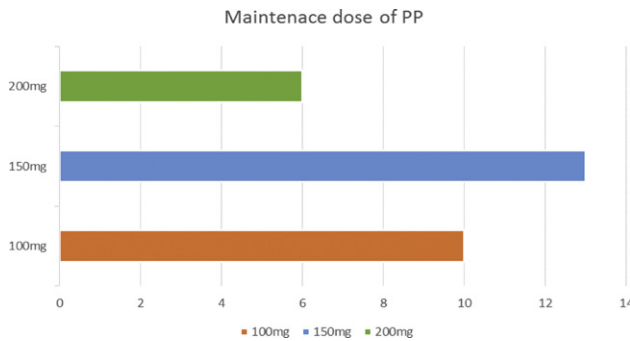


Fig. 2

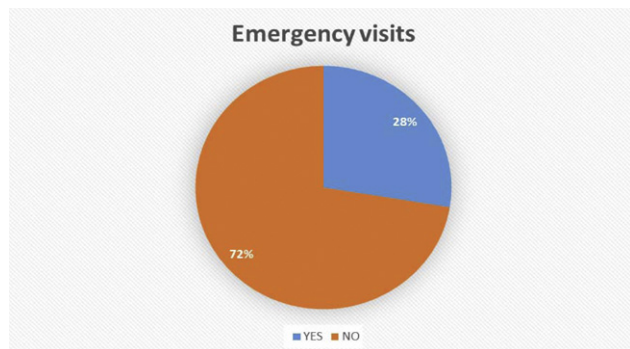


Fig. 3

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#### EV1227

### Vitamin B12 deficiency induced psychosis – a case report

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Vitamin B12 is one of the most essential vitamins affecting various systems of the body. Cases of neuropsychiatry disorders due to its deficiency are more common in elderly patients with prevalence of 10–20%. The most common psychiatry symptoms reported in the literature associated with vitamin B12 deficiency was depression, mania, psychotic symptoms, cognitive impairment and delirium. Here, we report a case of vitamin B12 deficiency in a 52-year-old male who presented with psychotic features: persecutory

delusions, tactile and auditory hallucinations. Patient had neither recorded psychiatry history nor any drug abuse. Medical history includes hypertension, diabetes mellitus and glaucoma. The patient was not a vegetarian. All relevant laboratory evaluations and head CT were normal except vitamin B12. The patient was treated with antipsychotics (risperidone 3 mg/day) and intramuscular vitamin B12. One week after, there was total remission of psychotic symptoms. In the follow-up during the next four months, psychiatry symptoms did not recur at any time. This case reports a rare case of vitamin B12 deficiency induced psychosis. Although there was concurrent administration of an antipsychotic along with vitamin B12, it underlines the importance of evaluation of vitamin B12 and other potential reversible causes of psychosis.

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#### EV1228

### QTc interval in patients diagnosed with schizophrenia receiving different defined daily dose (DDD) of antipsychotics

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**Introduction** Both 1st and 2nd generation of antipsychotics are associated with prolonged QTc interval. Prolonged QTc can lead to ventricular tachycardia and Torsade's de pointes, ultimately resulting to cardiac arrest and sudden death. Prolonged QTc interval due to increased DDD has not yet been investigated.

**Objective** To investigate whether increased DDD of antipsychotics, causes further prolonged QTc, by patients diagnosed with schizophrenia.

**Aims** To learn more about antipsychotics impact on the QTc interval in patients diagnosed with schizophrenia.

**Methods** An observational study of unselected patients diagnosed with schizophrenia. Enrolled from January 2013 through March 2015 with follow-up until June 2015 in the region of central Denmark. Data was collected from ECG records and patient journals.

**Result** ECGs were available in 58 patients. We observed no relation between increased DDD of antipsychotics and prolonged QTc. There were no differences in average QTc interval for the whole sample of patients receiving different DDD of antipsychotics.

**Conclusion** We do not recommend increased attention to patients treated with higher DDD of antipsychotics.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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#### EV1229

### Normalization of mortality rate and life expectancy in schizophrenia: Challenges and options

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Studies of mortality-rates and life expectancy in schizophrenia have consistently shown that the standardized mortality rate (SMR) are raised compared to the general population. In a meta-analysis (2007) of 38 studies with 22,296 deaths, all cause SMR was 2.98. SMR in a French cohort study (2009) in 3470 patients

with schizophrenia, were 3.6 for men and 4.3 for women. A recent epidemiological study (2015) of a US-cohort of 1,138,853 individuals with schizophrenia, 4,807,121 million years of follow-up and 74,003 deaths, all cause SMR was 3.7 for the total population: 3.3 for men and 4.3 for women. Life expectancy, the other side of the coin of increased SMR, in this study was reduced with 28.5 years. Studies in life expectancy, the other side of the coin of increased SMR, show a substantial, if not alarming reduced life expectancy. Israel with 12.5 years and Denmark–15 years for women and 20 years for men – reported the lowest reduction in life expectancy, while Arizona reported the highest reduction of 32 years. Progress in such diverse fields as genetics, neuro-imaging, early diagnosis of (ultra) high-risk populations, CBT and rehabilitation treatment, has not improved schizophrenia SMR or life expectancy. On the contrary, in far a trend is visible, the situation tends to worsen, not to improve. After going through the barriers for optimal somatic care, both patient and health care related, we will discuss options for improvement of the level of somatic health care, at the preventive and therapeutic level.

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### EV1230

#### **N-acetyl-cysteine in a double-blind randomized placebo-controlled trial: Towards biomarker guided treatment in early psychosis**

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**Purpose** Recent evidence points to a critical role of redox dysregulation induced oxidative stress in the pathophysiology of early phases of schizophrenia. An add-on trial with n-acetyl-cysteine (NAC) led to a reduction in negative symptoms in chronic schizophrenia patients. Aim of this study was to explore impact of addition of NAC to standard treatment in early psychosis (EP) patients.

**Methods** Double-blind, randomized, placebo-controlled trial of addition of NAC, 2700 mg daily, to antipsychotic treatment over 6 months. Monthly assessment of PANSS, GAF, SOFAS and antipsychotics treatment; quantification of brain glutathione levels (GSH<sub>mPFC</sub>) by <sup>1</sup>H-magnetic-resonance-spectroscopy and of blood cells glutathione (GSH<sub>BC</sub>) and glutathione peroxidase activity (GPx<sub>BC</sub>) as marker of oxidation status at the beginning and end of treatment.

**Results** Overall, 63 patients were included. Spectroscopy data showed that GSH<sub>mPFC</sub> increased by +23% in the NAC group, while it tended to decrease by –5% in the placebo group ( $P=0.005$ ). No significant difference between NAC and placebo was observed

on global changes in negative symptoms, positive symptoms or functional outcome. However, in patients with high-baseline oxidation status (GPx<sub>BC</sub>>22.3U/gHb), subgroup explorations revealed an improvement of positive symptoms over time compared to patients with low-baseline GPx ( $P=0.02$ ).

**Conclusions** While addition of NAC induced an increase of brain GSH, it had no impact on symptomatic and functional outcome in EP patients. However, in patients with high oxidation status, addition of NAC leads to significantly greater improvement in positive symptoms. Future studies on antioxidant interventions in EP should consider biomarker-guided treatment.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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### EV1231

#### **Peripersonal space and schizophrenia: Looking for the self boundaries**

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**Introduction** Peripersonal space has been defined as the area immediately surrounding the body in which interactions with a person or an object can occur. Larger peripersonal space may reflect discomfort in close interpersonal situation or cognitive deficit. Individuals with schizophrenia are more sensitive to social stimulation. The capacity to provide accurate judgments of peripersonal space boundaries depend on the capacity to create an organized and structured mental representation that integrates signals from different sensory modalities and brain regions.

**Objectives** We conducted a study on personal space in patients with schizophrenia using a paradigm that was not affected by emotional and social interference.

**Aims** We aimed to investigate the characteristics of personal space in patients with schizophrenia.

**Methods** We recruited 20 schizophrenic patients according to DSM-V criterion and 20 healthy volunteers, matched by gender and age. Schizophrenic symptoms were assessed using the Positive and Negative Syndrome Scale (PANSS). Participants performed the peripersonal space (PPS) task. Collected data underwent statistical analyses.

**Results** Schizophrenic patients demonstrate a stronger/weaker need for personal space, than the comparison group, depending on the score of negative and positive symptom, as assessed by using the PANSS even without emotional and social interference.

**Conclusions** Interpersonal interactions between the individual with schizophrenia and people in their immediate environment can lead to increased symptomatology. Social isolation is one of the most primary causes of poor quality of life in mental illnesses. Better understanding of the mechanisms for abnormal interactive behavior could provide significant valid guidelines for innovating intervention programs.

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