

## EPP1054

### The role of interleukin 10 in the development of the schizophrenia deficit syndrome in the light of the disconnection hypothesis

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**Introduction:** One of the subtypes of schizophrenia is the deficit syndrome (DS). Because of different risk factors, course, response to treatment weak prognosis, researches on this group of patients are important. Etiology of schizophrenia is often hypothesized as the inflammation process. Due to the imbalance of certain cytokines (interleukin-10 (IL-10) -antoinflammation cytokine, among others) changes in the function and structure of central nervous system may occur. That process could stand behind the outbreak of psychotic and deficit symptoms of the illness. Subinflammation can have an impact on the white matter structure. Disturbances in this area can cause impairment of cortical communication and hence, produce psychopathology. One of the structures that seem to have the basis of the deficit syndrome is inferior longitudinal fasciculus (ILF). ILF is a bundle of association fibers with interconnects temporal cortex with occipital cortex.

**Objectives:** The aim of our study was to investigate a relationship between the integrity of ILF and interleukin - 10.

**Methods:** 39 schizophrenia subjects divided into two groups DS (16) and non-deficit syndrome (NDS) (23) and 18 healthy controls (HC) participated in the study. A DTI analysis was performed on all study participants. The psychopathology of schizophrenia was assessed using the Positive and Negative Syndrome Scale (PANSS). The ILF analysis was then conducted using fractional anisotropy (FA) and mean diffusivity (MD) parameters. Blood samples were obtained to analyze serum level of IL-10 level.

**Results:** The differences in FA value in left ILF between DS and HC group were confirmed. The difference in values of IL-10 between groups were not confirmed. A negative correlation was found between FA values in left ILF and IL-10 ( $p = 0.033$ ) among DS group.

**Conclusions:** The impairment of the structure of ILF may be involved in etiopathogenesis of DS. Moreover, changes in IL-10 levels may be related to the microstructure of ILF bundle.

**Disclosure of Interest:** None Declared

## EPP1055

### Evenamide, as an add-on to antipsychotics, benefits patients with treatment resistant schizophrenia: 6-month interim results from the first 100 patients in an ongoing international randomized study

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**Introduction:** Treatment resistance schizophrenia (TRS) develops in ~ 30% of patients in about 5 years from starting treatment with 5-HT<sub>2</sub>/D<sub>2</sub> APs, resulting in increased morbidity, suicidality, and mortality. Findings from neurochemistry, neurometabolism, functional imaging in TRS patients indicate abnormalities in glutamatergic neurotransmission (Moghaddam B et al 2012; 37 4-15) rather than excess of dopamine synthesis (Demjaha A et al 2014; 75 11-3; Mouchlianitis E et al 2016; 42 744-52), suggesting the need to add a drug that attenuates glutamate release. Evenamide, a selective inhibitor of voltage-gated Na<sup>+</sup> channels, is devoid of biological activity at >130 CNS targets, normalizes glutamate release without affecting basal levels, and demonstrated benefits in animal models of psychosis as monotherapy and as an add on to APs (including clozapine), reversing deficits produced by amphetamine, scopolamine, phencyclidine, or ketamine

**Objectives:** Studies 014/015 were designed to evaluate the safety and preliminary efficacy of evenamide given orally at 3 fixed doses (7.5, 15 and 30 mg bid) in patients with TRS not responding to a therapeutic dose of an AP. Assessment of efficacy was based on changes of PANSS and CGI-S/C, while tolerability was assessed based on all safety measures

**Methods:** Study 014 is a 6-week, randomized, rater-blinded, international study with completers continuing assigned doses for an additional 46 weeks in an extension study (Study 015). Patients were initially randomized to 7.5 or 15 mg bid; the Independent Safety Monitoring Board (ISMB) allowed randomization to 30 mg bid after reviewing safety data from the first 50 patients. At baseline, patients were moderately to severely ill (CGI-S of 4 to 6), with a PANSS total score of 70-90 and predominant positive symptoms (score of 4 or more on at least 2 core symptoms and a PANSS positive total score  $\geq 20$ ), along with functional deficits (GAF  $\leq 50$ ). Efficacy ratings were performed by a psychiatrist blinded to the evenamide dose. Data were analyzed as a single group using descriptive statistics to assess changes from baseline to endpoint (Week 30)

**Results:** Interim, group-blinded, 30-week results for safety and efficacy data (PANSS and CGI) for the first 100 patients (including 6 on 30 mg bid) will be presented. Patients randomized to 7.5, 15, and 30 mg bid had all safety and efficacy data pooled in a single group to maintain the blind in the study. All results will be submitted to the ISMB, relevant health authorities and the FDA

**Conclusions:** This trial is the first international TRS trial of an NCE AP used as an add-on to a single typical or atypical AP. Results of this study may change the treatment of future TRS patients

**Disclosure of Interest:** None Declared

## EPP1056

### Characterization of “Responder” in patients with Treatment-Resistant Schizophrenia (TRS) treated with a new antipsychotic added to their current antipsychotic monotherapy

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