statistical trend was observed for the relationship between diurnal cortisol levels and positive symptoms (p=0.055).

**Discussion:** The current study is the first to examine the extent to which HPA axis function can predict development of prodromal symptoms in a high-risk cohort. Our finding that more abnormal HPA axis function (i.e., a decreased CAR and higher diurnal cortisol) at age 11–14 years is associated with both prodromal and depression symptoms at age 17–21 has important implications for aetiological theories and for clinical practice.

**T16. GLUTAMATERGIC CHANGES IN UHR**

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**Background:** The search for biomarkers may prove significant for short-term identification of UHR individuals (remission/non-remission). On a long-term basis, biomarkers might give the opportunity to delay or prevent psychotic episodes. Disturbances of the neurotransmitters glutamate and GABA have long been suspected to be involved in the pathophysiology of psychosis. These disorders have also been found in people at UHR, making it a promising area for early detection.

**Methods:** Participants: UHR individuals who meet the CAARMS criteria recruited from Mental Health Services in the Capital Region of Denmark and matching healthy controls.

**Examinations:** 1H-MRS of the ACC and thalamus. Diagnostic and psychopathological tests: CAARMS, SCID, SOFAS, PSP, Cornblatt, SANS, BPRS, MADRS, YMRS, CGI, PAS, SPI-A, AQLn. Cognitive tests as part of collaborative studies.

**Results:** So far 116 UHR individuals and 42 healthy controls have been scanned (December 2017) Very early preliminary analysis of the baseline data finds no significant difference in glutamate levels (in ACC and thalamus) in UHR patients compared to matched healthy controls. Baseline data remains to be analysed in relation to relevant subgroups of patients e.g. based on clinical outcome. GABA analysis and analysis of follow-up data are also yet to be performed. Glutamate data will be presented at the meeting.

**Discussion:** More studies are needed in this field, since results so far have been diverging. Baseline data remains to be analysed in relation to relevant subgroups of patients e.g. based on clinical outcome. GABA analysis and analysis of follow-up data are also yet to be performed. Glutamate data will be presented at the meeting.

**T17. OXIDATIVE STRESS BIOMARKERS AND NEGATIVE DIMENSION IN THE FIRST TEN YEARS OF SCHIZOPHRENIA: A 1-YEAR FOLLOW-UP STUDY**

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**Background:** Several studies have documented changes in oxidative parameters and antioxidant enzymes in patients with schizophrenia (1, 2). However, their relation to negative symptoms and the longitudinal clinical course is still unclear. The objectives of the present study are to: 1) analyze the association between oxidative stress biomarkers and negative dimension; 2) identify if these biomarkers could predict clinical outcomes in stable patients with schizophrenia at 1-year follow-up.

**Methods:** A 1-year follow-up study of 57 stable outpatients with schizophrenia (≤10 years of illness) (mean age=31.5 ± 6.5; 63.2% males).

**Assessment:** PANSS, Clinical Assessment Interview of Negative Symptoms (CAINS) - Motivation/Pleasure (MAP) & Expression (EXP) domains, Brief Negative Symptom Scale (BNSS). Oxidative stress biomarkers: homocysteine, hemolysis test (% hemolysis), lipid peroxidation subproducts (LPO), catalase activity in erythrocytes (CAT).

Pearson correlations were performed to determine associations between biomarkers and clinical scores at baseline, and they were included in stepwise multiple linear regression analyses, considering potential confounding factors.

The clinical course for each psychopathological domain was determined using the formula: [follow-up-baseline scores]. Positive values were interpreted as worsening, while negative improvement. Pearson correlation and multiple linear regression analyses were performed to determine if baseline levels of oxidative stress parameters were predictors of clinical changes at follow-up.

**Results:** 1) Baseline associations: Final regression models identified that LPO level was a significant predictor of lower scores in PANSS-N, BNSS total, Avolition and Blunted Affect subscale of BNSS and CAINS-EXP (β=-0.468, -0.254, -0.296, -0.247, respectively).

2) Longitudinal course: At 1-year follow-up, patients only improved significantly (p<0.05) in PANSS-Total (59.4 ± 16.4 - 54.5 ± 16.0 (t=3.362)), PANSS-General (29.7 ± 8.9 - 26.9 ± 7.9 (t=3.362)), Blunted Affect subscale [6.9 ± 5.0 - 5.9 ± 4.7 (t=2.489)], and almost significant (p=0.069) in CAINS-EXP and BNSS total score. No significant changes in BMI, waist circumference, smoking or antipsychotic equivalent doses were detected, but they were also considered in regression analyses. A higher percentage of hemolysis at baseline, with a decrease in equivalent doses of antipsychotics, both significantly predict an improvement in scores of PANSS-N (R2=0.140, F=7.166), BNSS (R2=0.246, F=6.193) and CAINS-EXP (R2=0.186, F=5.259).

**Discussion:** Lower concentrations of LPO were related to greater severity of negative symptoms as avolition and blunted affect (inner world). Longitudinal analyses showed that higher % of hemolysis at baseline predict an improvement of negative dimension at 1-year follow-up. From our results, we hypothesize that there is an inverse relationship between oxidative stress and negative dimension in stable patients with schizophrenia during the first ten years of illness.

**T18. MULTIVARIATE BRAIN ANATOMICAL DIFFERENCES IN POSITIVE AND NEGATIVE SCHIZOTYPY: PRELIMINARY RESULTS FROM THE TYPIA STUDY**

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**Background:** In schizotypy, a factor structure similar to the one observed in schizophrenia has been unraveled, being the positive and negative the most consistently replicated dimensions. Despite this fact, most of the studies on brain volume patterns in schizotypy consider it as an unitary rather than a multidimensional construct. Hence, based on previous results showing that schizophrenia and schizotypal personality traits share common

**Poster Session I**

S119

Abstracts for the Sixth Biennial SIRS Conference