minimum three months remission of psychotic symptoms, and to find minimal effective dose of antipsychotic medication. Negative symptoms, cognitive impairments and the side effects of antipsychotic medication can cause a serious and long-term burden for patients and can reduce their quality of life. The TAILOR study will investigate these important aspects.

Methods: The study is a randomized multicenter single blinded clinical trial. The aim is to include 250 patients from the outpatient early intervention program, OPUS, a 2 years manualized psychiatric treatment programme. At baseline patients must have 3 months remission of psychotic symptoms as documented by the SAPS (Schedule for Assessment of Positive Symptoms in Schizophrenia).

The patients will be randomized to either tapered discontinuation or dose reduction of antipsychotic medication or treatment as usual stratified according to substance abuse. The intervention will last for 1 year, and follow up interviews will be made after 1, 2, and 5 years.

The patients will receive a user-developed mobile phone application to make daily registrations.

Results: The study has been including patients since May 2017. The first data is expected in 2019.

Discussion: The TAILOR trial will contribute to knowledge about the effect of tapering/discontinuation of antipsychotic medication in early phases of schizophrenia spectrum disorders and hopefully the results may guide future clinical treatment regimens of antipsychotic medication.

The trial is a complex medical intervention, and it raises ethical, practical and organizational challenges. When designing the TAILOR trial ethical questions were raised regarding blinding and the design of the intervention. In the trial only the researchers are blinded, neither clinicians nor patients, because they should be attentive of the high risk of relapse in the discontinuation group. The design gives the clinicians the possibility to adjust the dose of the antipsychotic medication to ensure sufficient treatment. Therefore, the trial only includes assessor blinding and the groups might end up being more similar than intended.

In general, it is of ethical consideration that the trial participants in the tapering/discontinuation group will be subjected to a higher risk of relapse. On the other hand, it seems unethical if research were not to discover the group of patients who can discontinue antipsychotic medication without relapsing. Practical challenges will be sufficient recruitment or patient motivation and dropout.

T55. DRIVING ABILITIES IN CLINICALLY STABLE OUTPATIENTS WITH SCHIZOPHRENIA

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Background: According to the UN convention of human rights, individual mobility is an important aspect for people suffering from chronic disease. Recent studies have shown that 30% of patients suffering from schizophrenia have a driving license for motorized vehicles, however, studies on driving abilities among this patient group are scarce. Accordingly, the current study investigates the parameters, which are relevant in this regard.

Methods: In this naturalistic study, stable patients, diagnosed with schizophrenia according to ICD-10, between 18 and 60 years of age, are recruited on an outpatient basis. They have to be clinically stable without hospitalization for at least 6 months and have to be on the same medication for at least 6 months. Psychopathology and extrapyramidal motor symptoms (EPS) are assessed by means of the Positive and Negative Syndrome Scale (PANSS) and the Modified Simpson-Angus Scale (MSAS), respectively. Driving abilities are investigated by means of a computerized test battery of the Wiener Testsystem, measuring visual perception, reactivity and stress tolerance, concentration, vigilance, and motor coordination.

Results: So far, 42 outpatients suffering from schizophrenia, with a mean age of 42.7 ± 8.9 years and a mean duration of illness of 11.2 ± 5.5 years, have been included into the study. 52% were male and the mean education was 14.4 ± 4.0 years. The mean PANSS total score was 56.3 ± 20.3 (positive symptoms: 12.9 ± 5.4; negative symptoms: 13.6 ± 5.5; general symptoms: 29.7 ± 13.6). All patients were treated with second generation antipsychotics, and only one had a combination therapy with an additional first generation antipsychotic. We found significant positive correlations between driving abilities and both years of education and EPS, whereas residual symptoms (PANSS) were not associated with driving abilities.

Discussion: The relationship between EPS and driving abilities was not surprising, since motor flexibility might be seen as basic requirement in traffic situations. The missing correlation between residual symptomatology and driving abilities, on the other hand, may be explained by very low mean PANSS scores and the small range of scores in our sample. To summarize, these data suggest that in clinically stable outpatients suffering from schizophrenia driving abilities are primarily influenced by EPS rather than by residual symptomatology. Altogether, further studies are needed with a larger sample size.

T56. AN EXPLORATORY ANALYSIS CONVERTING SCORES BETWEEN THE PANSS AND BNSS

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Background: The Brief Negative Symptom Scale is a relatively new instrument designed specifically to measure the negative symptoms in schizophrenia. Recently more clinical trials include the BNSS scale as a secondary or exploratory outcome, typically along with the PANSS. In the current analysis we aimed at establishing the equations that would allow conversion between the BNSS scale total score and the PANSS negative subscale and PANSS negative factors score as well as conversion equations between the expressive deficits and avolition/apathy factors of the scales. (Kirkpatrick, 2011; Strauss, 2012)

Methods: Data from 518 schizophrenia clinical trials subjects with both PANSS and BNSS data available were used. Regression analyses predicting the BNSS total score with the PANSS negative subscale score, and the BNSS total score with the PANSS Negative Factor (NFS) score were performed on data from all subjects. Regression analyses predicting the BNSS avolition/apathy factor (items 1, 2, 3, 5, 6, 7, and 8) with the PANSS avolition/apathy factor (items N2, N4 and G16) and the BNSS expressive deficits factor (items 4, 9, 10, 11, 12, and 13) with the expressive deficits factor (items N1, N3, N6, G5, G7, and G13) of the PANSS were performed on a sample of 318 subjects with individual BNSS item scores available. In addition to estimating the equations we as well calculated the Pearson's correlations between the scales.

Results: The PANSS and BNSS avolition/apathy factors were highly correlated (r=0.70) as were the expressive deficits factors r=0.83). The following equations predicting the BNSS total score were obtained from regression analyses performed on 2,560 data points:

\[
\text{BNSS}\_\text{total} = -11.64 + 2.10\times\text{PANSS}\_\text{negative subscale}
\]

\[
\text{BNSS}\_\text{total} = -9.26 + 2.11\times\text{PANSS}\_\text{NFS}
\]

The following equations predicting the BNSS factor scores from the PANSS factor scores were obtained from regression analyses performed on 1,634 data points:

\[
\text{BNSS}\_\text{avolition/apathy} = -2.40 + 2.38 \times \text{PANSS}\_\text{avolition/apathy}
\]

\[
\text{BNSS}\_\text{expressive deficit factor} = -4.21 + 1.27 \times \text{PANSS}\_\text{expressive deficit factor}
\]

Discussion: The BNSS differs from the PANSS negative factor because it addresses all five currently recognized domains of negative symptoms including anhedonia and attempts to differentiate anticipatory from consummatory states. In our analysis we have replicated the strong correlation between the BNSS total score and PANSS negative subscale and newly
identified strong correlations between the BNSS total score and NFS as well as strong correlations between the avolition/apathy and expressive deficit factors of the BNSS and the PANSS scales. (Kirkpatrick, 2011) The provided equations offer a useful tool allowing researchers and clinicians to easily convert the data between the instruments for reasons such as pooling data from multiple trials using one of the instruments, to allow interpretation of results within the context of previously conducted research, etc. as long as well offer a framework for risk based monitoring to identify data deviating from the expected relationship and allow for a targeted exploration of the causes for such a disagreement. The data used for analysis included not only subjects with predominantly negative symptoms but as well acutely psychotic subjects as well as subjects in stable conditions allowing therefore to generalize the results across the majority of schizophrenia subjects. This post-hoc analysis is exploratory. We plan to further explore the potential utility of equations addressing the relationships among schizophrenia measures of symptom severity in an iterative manner with larger datasets.

T57. EFFECTS OF 0.5MS AND 1.5MS PULSE-WITHDS ON CARDIOVASCULAR FUNCTION IN SCHIZOPHRENIA PATIENTS RECEIVING ELECTROCONVULSIVE THERAPY

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Background: Electroconvulsive therapy (ECT) has been shown to have a profound effect on cardiovascular functions. The initial parasympathetic response, followed by the sympathetic surge and the second parasympathetic peak characterize a typical ECT session and in patients with pre-existing cardiac disorders, this ‘roller-coaster ride’ of autonomic discharges can drastically increase morbidity and mortality; albeit such incidences are rare nowadays with the advances in medical technology. While lateralization and stimulus dose (in terms of milli coulombs, mC) are known to affect cardiovascular response, the effect of pulse-width (PW) on the latter has not been explored. Compared to 1.5-millisecond (ms) stimulus pulse trains, trains with 0.5ms PW lasts 3 times longer for equivalent stimulus charges, other parameters remaining constant. This would translate to greater initial parasympathetic response duration, and the implications of such occurrences for cardiovascular well-being are largely unknown.

Methods: Seventy-one consenting adult patients (M=33, F=38; mean age 30.87 ± 9.59 years; mean duration of illness 89.68 ± 77.98 months) were randomized to receive bilateral ECT with either 0.5ms (n=35) or 1.5ms (n=36) PW stimulus; after obtaining institutional ethical-committee’s approval. Seizure threshold was determined during the first session. Rate-Pressure product (RPP; pulse*systolic blood-pressure) was calculated during the second ECT session, in which stimulus was administered at 1.5-2 times the threshold for the two groups, at 5 time points (RPP1-5, viz. pre-anaesthesia, during anaesthesia, during convulsive motor seizure, and 1 and 2 minutes post seizure, respectively). They were compared between the groups using independent-sample t-test. At baseline, the patients were assessed on PANSs for psychopathology.

Results: Two groups did not differ on socio-demographic and clinical characteristics at baseline. Mean administered dose of anaesthetic agent and muscle relaxant were comparable. While the mean seizure threshold and mean charge administered at 2nd ECT were significantly lower in the 0.5 ms group, they were otherwise comparable on mean duration of seizure (motor and EEG), and the RPPs at all 5 time-points. Both Max.RPP (1810.22 ± 4477.4 mmHg/min in 0.5ms, 17931.53 ± 3598.5 mmHg/min, p=0.864) and Max.RPP-RPP2 (5010.58 ± 2893.3 mmHg/min in 0.5ms, 5811.2 ± 4270.9 mmHg/min in 1.5ms, p=0.389) were comparable between the two groups.

Discusison: The characteristic sequence of cardiac events unfolding in an ECT session comprises of a temporary asystole during the administration of the stimulus, followed by an increase in blood pressure and pulse rate during clonic phase, and another slowing of heart rate at the end of motor seizure. The stimulus train duration in 0.5ms group lasts 3 times longer than in 1.5ms group for an equivalent amount of charge, thus increasing the asystole duration and theoretically altering subsequent autonomic responses. However, the groups failed to demonstrate any significant effects of these alterations in terms of altered cardiac activity implying that such alterations might not be clinically relevant. It is well known that briefer PWs cause lesser cognitive side-effects, are more efficient in eliciting seizures, present analysis shows that the two PWs of 0.5ms and 1.5ms might have similar effects on cardiovascular function, at least in otherwise-healthy adult schizophrenia patients, for similar anaesthetic agents, even if the train with 0.5ms PW lasts for double the time as with 1.5ms PW.

T58. SARCASM COMPREHENSION AS A SOCIAL COGNITION MEASURE IN SCHIZOPHRENIA – A SYSTEMATIC LITERATURE SEARCH AND META-ANALYSIS ON THE USE OF THE TASIT

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Background: Social cognition tasks with higher ecologically validity could be helpful both as an outcome measure for training and for social cognition impairment in schizophrenia. The comprehension of sarcasm and irony is a candidate for a valid, replicable task.

Methods: Tests and paradigms as well as studies in schizophrenia are available in English, Dutch, German, Italian, Greek and other languages. The Awareness of Social Inference Test (TASIT) (McDonald et al.) is currently the most applied paradigm. Here, we present a systematic literature review and meta-analysis on application of these paradigms in patients with schizophrenia.

Results: 25 studies with data from n=2185 patients with schizophrenia and n=1474 controls used the TASIT. This exceeds the numbers for other irony comprehension paradigms. Separate meta-analyses were calculated for the “sarcasm-enriched” and “sarcasm-minimal” subtests with data from 5 different English language studies. In both subtests, patients with schizophrenia showed significant impairment. Non-English translations of the TASIT show a comparable picture. Longitudinal data are available from 4 studies. Studies in high risk populations showed mixed results, however the TASIT is included in longitudinal cohort studies such as NAPLS-2.

Discussion: We discuss differences with other task such as paradigms without prosodic or face information or the available IMRI investigations.

T59. VIRTUAL REALITY ASSESSMENT OF FUNCTIONAL CAPACITY IN EARLY SCHIZOPHRENIA: ASSOCIATIONS WITH NEUROCOGNITION, FUNCTIONAL CAPACITY PERFORMANCE, AND DAILY FUNCTIONING

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Background: Research using virtual reality assessment of functional capacity has shown promise as a reliable and valid way to assess treatment response in patients with established schizophrenia. There has been little work on virtual reality based assessments of functional capacity for...