along with the experience of using these tools and collecting these data as part of a large multi-country, multi-center study.
Discussion: This study will allow analysis of the effects of glutamatergic modulation with BI 425809 on cognitive impairment in schizophrenia, a core feature of the schizophrenia symptomatology. In addition to the traditional endpoints that assess cognition and functioning, we also evaluate novel clinical trial endpoints of motivation and value representation.
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S28. THE FEASIBILITY AND EFFICACY OF SOCIAL COGNITION AND INTERACTION TRAINING FOR OUTPATIENTS WITH SCHIZOPHRENIA IN JAPAN: A MULTICENTER RANDOMIZED CLINICAL TRIAL

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Background: Schizophrenia is a disabling illness. Social Cognition and Interaction Training (SCIT) seeks to improve patients' social functioning by alleviating deficits in social cognition. SCIT has shown promise in improving social cognition in patients with schizophrenia but has not yet been studied in Japan.
Methods: An assessor-masked, randomized, parallel-group clinical trial was conducted to compare the feasibility and efficacy of SCIT with treatment as usual (TAU). Seventy-two patients diagnosed with schizophrenia or schizoaffective disorder consented to participate in the trial. The subjects were randomly allocated to either a SCIT or a TAU subgroup. SCIT is a manual-based group intervention that is delivered in 20–24 hour-long weekly sessions. We hypothesized that SCIT would be found to be feasible and that patients who were randomized to receive SCIT would exhibit improvements in social cognition.
Results: The persistence rate in the SCIT subgroup was 88.9%, and the average attendance rate was 87.0%. Intrinsic motivation was significantly higher in the SCIT subgroup than the TAU group during the first half of the program. In the case of the social cognition measure, significant change was observed only in the SCIT subgroup; however, the interaction between timepoint and group failed to reach significance. In an exploratory subgroup analysis, a shorter duration of illness was found to be associated with significantly better improvement on the social cognition measure in the SCIT subgroup compared with the TAU subgroup.
Discussion: In terms of the primary objective, the relatively low dropout rate observed in the present study suggests that SCIT is feasible and well tolerated by patients with schizophrenia in Japan. This view is also supported by participants' relatively high attendance and intrinsic motivation. The effect of SCIT on social cognition was no different from that of TAU, however, there is a possibility that it may show efficacy in those with short duration of illness.

S29. EXECUTIVE COGNITIVE TRAINING VS. PERCEPTUAL COGNITIVE TRAINING FOR SCHIZOPHRENIA-SPECTRUM DISORDERS: TREATMENT OUTCOMES AND PREDICTORS OF RESPONSE

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Background: Neurocognitive impairments are the best predictors of community functioning for individuals with schizophrenia-spectrum disorders. Cognitive remediation is a psychological intervention designed to improve neurocognitive abilities and community functioning. However, different theoretical approaches have developed without any studies directly comparing them. Additionally, with a movement towards personalizing cognitive enhancing techniques, greater emphasis is being placed on determining predictors of treatment response. The current study is the first to compare the two dominant approaches to cognitive remediation (training of executive skills and training of perceptual skills) and examine predictors of treatment response.
Methods: 70 outpatients with schizophrenia-spectrum disorders were randomized to receive either 6 weeks of executive training (ET) or perceptual training (PT). Electrophysiological activity, neurocognition, functional competence, case-manager rated community functioning, clinical symptoms, and self-report measures were assessed at baseline, post-treatment, and 12-weeks post-treatment.
Results: There were minimal differences between groups at the post-treatment visit. PT improved EEG mismatch negativity amplitude significantly more than ET immediately post-treatment (d = 0.64), however, the effect did not persist at 12-week follow-up (d = 0.01). Examining long-term effects, at 12-week follow-up, ET increased EEG theta power during an n-back working memory task (d = 1.01), neurocognition (d = 0.64), functional competence (d = 0.67), and case manager rated community functioning (d = 0.53) to a greater extent than PT. Larger P300 amplitude (B = .47) and theta power during a working memory task (B = .34) at baseline were significantly associated with larger improvements in neurocognition post-treatment. Baseline mismatch negativity amplitude was not significantly associated with treatment response (B = .17), and no baseline EEG measures predicted functional outcomes.
Discussion: Both PT and ET improved neurophysiological mechanisms specific to their domains of intervention, however, only ET resulted in improvement in neurocognition and functioning. Improvements in favor of ET did not appear immediately post-treatment but emerged 12 weeks after the end of active treatment. Training executive functioning may prime further cognitive and functional improvements. Executive functions may be more functionally relevant than other cognitive domains and when addressed in treatment lead to better outcomes. Greater P300 amplitude and theta power may be associated with learning-related processes which are important for acquisition and retention of skills during cognitive training programs.

S30. COMBINING PHARMACOTHERAPY OF BI 425809 WITH COMPUTERIZED COGNITIVE TRAINING IN PATIENTS WITH SCHIZOPHRENIA: A RANDOMIZED TRIAL METHODOLOGY

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Background: Trials of pharmacotherapies targeting cognition in schizophrenia have produced mainly negative results, and there are no approved cognition-enhancing pharmacological treatments available for patients with schizophrenia. This may be due in part to varying levels of concurrent cognitive stimulation, particularly for pharmacotherapies targeting neuroplasticity, which is activity-dependent (i.e. responds to cognitive demand). Often, the surroundings and environment of patients with schizophrenia provide only a low level of cognitive demand. At-home computerized