headache (2.17%), akathisia (1.74%) and restlessness (1.3%) were the most common. Most events were mild in severity (66.1% mild, 32.2% moderate, 1.7% severe (insomnia)).
Conclusions: While not definitive, and limited by small sample size, the co-administration of cariprazine with other antipsychotics did not show an unexpected safety profile or overlapping toxicities. This is an important finding, if intermittent or longer co-administration of other antipsychotics are unavoidable with cariprazine treatment.

Conflict of interest: Studies were funded by Gedeon Richter Plc. and Allergan Plc (prior to its acquisition by AbbVie). Dr Vass, Dr Barabássy, Dr Laszlovszky, Dr Sebe, Dombi, Dr Szatmári and Dr Németh are employees of Gedeon Richter Plc.
Keywords: Cariprazine; schizophrénia; polypharmacy; safety

EPP1215

Multivariate approach to identify electrophysiological markers for diagnosis and prognosis of schizophrenia

L. Giuliani[1]*, N. Koutsouleris[2], T. Koenig[3], A. Mucci[4], A. Vignapiano[5], A. Reuf[2], M. Altamura[6], A. Bellomo[6], R. Brugnoli[7], G. Corrivetti[8], G. Di Lorenzo[9], P. Girardi[7], P. Monteleone[10], S. Galderisi[11] and M. Maj[11]

[1]Psychiatry, Università degli Studi della Campania "Luigi Vanvitelli", Napoli, Italy; [2]Department Of Psychiatry And Psychotherapy, LMU München, München, Germany; [3]Psychiatry, University Hospital of Psychiatry, Bern, Bern, Switzerland; [4]Department Of Psychiatry, Univeristy of Campania Luigi Vanvitelli, Naples, Italy; [5]Psichiatria, ASL Napoli 1 - Centro, Napoli, Italy; [6]Psychiatry, University of Foggia, Foggia, Italy; [7]Psychiatry, University of Rome "La Sapienza", Rome, Italy; [8]Department Of Psychiatry, 10European Biomedical Research Institute of Salerno (EBRIS), salerno, Italy; [9]Psychiatry, University of Rome "Tor Vergata", Rome, Italy; [10]Department Of Medicine, Surgery And Dentistry "scuola Medica Salernitana", University of Salerno, Baronissi/Salerno, Italy and [11]Department Of Psyschiatry, University of Campania "Luigi Vanvitelli", Naples, Italy

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1425

Introduction: Different electrophysiological indices have been investigated to identify diagnostic and prognostic markers of schizophrenia (SCZ). However, these indices have limited use in clinical practice, since both specificity and association with illness outcome remain unclear. In recent years, machine learning techniques, through the combination of multidimensional data, have been used to better characterize SCZ and to predict illness course.
Objectives: The aim of the present study is to identify multimodal electrophysiological biomarkers that could be used in clinical practice in order to improve precision in diagnosis and prognosis of SCZ.
Methods: Illness-related and functioning-related variables were measured at baseline in 113 subjects with SCZ and 57 healthy controls (HC), and after four-year follow-up in 61 SCZ. EEGs were recorded at baseline in resting-state condition and during two auditory tasks (MMN-P3a and N100-P3b). Through a Linear Support Vector Machine, using EEG data as predictors, four models were generated in order to classify SCZ and HC. Then, we combined unimodal classifiers' scores through a stacking procedure. Pearson's correlations between classifiers score with illness-related and functioning-related variables, at baseline and follow-up, were performed.
Results: Each EEG model produced significant classification ($p < 0.05$). Global classifier discriminated SCZ from HC with accuracy of 75.4% ($p < 0.01$). A significant correlation ($r=0.40$, $p=0.002$) between the global classifier scores with negative symptoms at follow-up was found. Within negative symptoms, blunted affect showed the strongest correlation.
Conclusions: Abnormalities in electrophysiological indices might be considered trait markers of schizophrenia. Our results suggest that multimodal electrophysiological markers might have prognostic value for negative symptoms.

Keywords: schizophrénia; EEG; machine learning; negative symptoms

EPP1216

Risk factors for psychotic relapse in chronic schizophrenia after dose-reduction or discontinuation of antipsychotics. A systematic review and meta-analysis

J. Bogers[1]*, G. Hambarian[1], J. Vermeulen[2] and L. Dehaan[2]

[1]High Care Clinics, MHO Rivierduinen, Leiden, Netherlands and [2]Psychiatry, Amsterdam University Medical Centre, Amsterdam, Netherlands

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1426

Introduction: Patients are often treated with high doses or combinations of antipsychotics, which may hamper recovery. Dose-reduction (DR) or discontinuation of antipsychotic medication in chronic patients carries the risk of psychotic relapse.
Objectives: To identify risk factors of psychotic relapse after DR or discontinuation, we (i) determined the rate of relapse after DR or discontinuation in patients with chronic schizophrenia, and (ii) assessed risk factors for psychotic relapse.
Methods: From studies on dose-reduction from January 1950 through June 2019 we calculated event rates per person-years including 95% confidence intervals. We extracted: (1) patient characteristics (age, percentage of male subjects, setting, duration of illness), (2) dose-reduction/discontinuation characteristics (start-dose, end-dose, dose-reduction in milligrams and percentage of start-dose, time-period of dose-reduction), (3) follow-up characteristics (time after dose-reduction), and (4) study characteristics (blinding, publication-year and relapse definition).
Results: 46 unique cohorts, presenting 1677 patients in which doses were reduced/discontinued were included in meta-analysis. We found an overall event rate per person-years on psychotic relapse of 0.55 (CI95% 0.46-0.65;$p<0.0001$;I^2 =79). Most robust event rates for psychotic relapse were seen for discontinuing antipsychotics, and if not discontinuing, dose-reduction till under 5mg haloperidol equivalents daily (HE). Abrupt reduction yielded higher rates than gradual reduction. During short follow-up time more relapses occurred than in studies with long follow-up time.
Conclusions: In patients with chronic schizophrenia discontinuing, and to a lesser extent DR till end-dose<5mgHE, patients who reduce doses abrupt, inpatients, and patients with a short duration of illness carry highest relapse risk. Most relapses occur during the first half year after DR.

Keywords: dose reduction; Relapse; Risk factors; meta-analysis