

## EPP0537

### Clinical and biological features associated to bipolar disorder with comorbid migraine: results from the FACE-BD cohort

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doi: 10.1192/j.eurpsy.2023.839

**Introduction:** Migraine and bipolar disorder (BD) are two chronic and recurrent disorders with a major impact on patient's quality of life. It is now well known that affective disorders and migraine are often comorbid (Leo *et al.* Scand J Pain. 2016; 11:136-145). Starting from these observations, we can hypothesize that BD patients with comorbid migraine might have specific clinical and biological features.

**Objectives:** The aim of this study was to estimate the prevalence of migraine in a cohort of French BD patients; determine sociodemographic, clinical, and biological features associated BD-migraine comorbidity.

**Methods:** 4348 BD patients from the FACE-BD cohort were included from 2009 to 2022. Sociodemographic and clinical characteristics, lifestyle information, and data on antipsychotic treatment and comorbidities were collected, and a blood sample was drawn. The Structured Clinical Interview for DSM-IV Axis I

Disorders was used to confirm the diagnosis of BD. Migraine diagnosis was established according to a clinician-assessed questionnaire.

**Results:** 20.1% of individuals with BD had comorbid migraine. Half of these patients received treatment for migraine. Multivariate logistic regression model showed that risk of migraine in women was nearly twice that in men (OR = 1.758; 95% CI, 1.345-2.298). Anxiety disorder, sleep disturbances and childhood trauma were also associated with an increased risk of migraine comorbidity. Patients receiving antipsychotic treatment had less risk of developing migraine than those not receiving those treatment (OR 0.716, 95% CI, 0.554-0.925), independent of other potential confounders.

**Conclusions:** The prevalence of migraine in our cohort was lower than those previously reported in other studies. This result might suggest an overestimation of migraine diagnosis in BD patients population studies. However, BD-migraine comorbidity could constitute a subphenotype of bipolar disorder requiring specific treatments.

**Disclosure of Interest:** None Declared

## EPP0538

### Characterization of the inflammatory/immune-neuroendocrine-BDNF interplay during affective episodes and euthymia in bipolar disorder patients: in the search of a peripheral reliable and highly predictive biosignature

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doi: 10.1192/j.eurpsy.2023.840

**Introduction:** Bipolar disorder (BD) is a psychiatric disease whose heterogeneity in phenotypic manifestations and disease severity hampers the diagnosis and the achievement of adequate therapeutic management. Increased pro-inflammatory cytokines and cortisol levels (CORT) have been observed in BD patients that might affect brain plasticity by decreasing Brain-Derived-Neurotrophic Factor (BDNF) levels. However, BD etiopathological mechanisms are still largely unclear and little is known about the interaction among these biomarkers and affective episodes.

**Objectives:** To assess changes in peripheral endocrine and inflammatory markers, CORT awakening response, BDNF and cytokines levels during an acute phase of the disease and during euthymia and to evaluate whether these changes might be exploited as a biosignature of the disease.

**Methods:** The study will be carried out on BD patients aged 18-65 who will be recruited during affective episodes (depressive, manic/hypomanic phase). In addition, a control group of 40 healthy subjects, age- and sex-matched will be also enrolled. All assessments will be carried out at the time of recruitment and after 3 and 6 months. Blood samples will be collected to evaluate cytokines (IL-1, IL-2, IL-6, IL-10, TNF-alpha, IFN-gamma) and BDNF. Hypothalamic-pituitary-adrenal (HPA) axis response will be