

**Methods:** Eighty-seven participants with BD in different phases of the illness were included. Patterns of adherence for wearable use, daily and weekly self-rating scales over 15 months were analyzed to identify adherence trajectories using growth mixture models (GMM). Multinomial logistic regression models and Multiple Component Analyses were fitted to compute the effects of predictors on GMM classes.

**Results:** Adherence rates were 79.5% for the wearable; 78.5% for weekly self-ratings; and 74.6% for daily self-ratings. GMM identified three latent class subgroups: (i) participants with good adherence with the protocol; (ii) participants with partial adherence; (iii) participants with poor adherence. Women, participants with a history of suicide attempt, and those with a history of inpatient admission were more likely to belong to the group with good adherence.

**Conclusions:** Participants with higher illness burden (e.g., history of admission to hospital, history of suicide attempts) have higher adherence rates to e-monitoring. This is important because our findings debunk myths around illness burden as an obstacle to adhere to e-monitoring studies. Participants might have seen e-monitoring as a tool for better documenting symptom change and better managing their illness, thus motivating their engagement.

**Disclosure of Interest:** None Declared

## EPP0788

### Associations between long-term lithium treatment and renal, thyroid, and parathyroid function: A register-based study

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**Introduction:** Although the effect of lithium treatment on kidney and endocrine systems has been extensively investigated, this literature, however, suffers from substantial heterogeneity and many prior studies are limited by short follow-up on just one marker of interest. **Objectives:** We aimed to determine the impact of long-term lithium therapy on renal, thyroid and parathyroid function within a large real-world cohort.

**Methods:** We performed a cohort study within the Central Region of Denmark (approximately 1.3 million inhabitants). Using the Electronic Patient Record system, we identified all patients with at least one serum-lithium (se-Li) measurement in the period from January 1, 2013 to July 20, 2022, and a reference group of patients diagnosed with bipolar disorder (ICD-10: F30, F31) was matched on age, sex and creatinine level. The outcomes were renal, thyroid, and parathyroid function as indicated by all blood tests taken during follow-up measuring creatinine, estimated glomerular filtration rate (eGFR), thyroid-stimulating hormone (TSH), parathyroid hormone (PTH) and calcium. Multilevel regression analyses adjusted for age, sex, severity of the mental disorder (as indicated by the number of hospitalizations), and somatic comorbidity

calculated the association between lithium treatment and development in renal, thyroid, and parathyroid function over time.

**Results:** A total of 4,709 lithium users (61.5% females, median age 46 years [IQR: 32-60]) and 4,027 control individuals were identified with a total follow-up period of 14,686 person-years (median = 1.7 years, range: 1-9.5). Out of the 4,709 lithium users, a total of 3,157 were incident lithium users. The final results will be shown at the 2023 EPA Congress.

**Conclusions:** The conclusions will be presented at the congress.

**Disclosure of Interest:** None Declared

## EPP0789

### Are there any differences in clinical and biochemical variables between bipolar patients with or without lifetime psychotic symptoms?

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**Introduction:** Bipolar Disorder (BD) is a frequent psychiatric disorder, which can be associated with high disability. Psychotic symptoms occur in more than half of bipolar patients and are associated with an unfavorable course of the disorder (Chakrabarti *et al.* World J Psychiatry 2022; 12(9) 1204-1232).

**Objectives:** The aim of this study is therefore to identify clinical and biological markers able to discriminate between BD patients with (BD-PS) and without lifetime psychotic symptoms (BD-NPS) to facilitate early diagnosis and to implement a target clinical management of these patients.

**Methods:** We recruited 665 patients consecutively hospitalized for BD at Fondazione IRCCS Policlinico (Milan) and at San Gerardo Hospital (Monza). Data were obtained through a screening of the clinical charts and blood analyses conducted during the hospitalization. Patients were assessed by psychometric scales. The two groups (BD-PS and BD-NPS) were compared by t tests for quantitative variables and  $\chi^2$  tests for qualitative ones. Variables that resulted to be significant in univariate analyses were inserted in binary logistic models with the presence of psychotic symptoms as dependent variable.

**Results:** Among the total sample, 64.5% of patients were affected by BD-PS while 35.5% by BD-NPS. The final binary logistic regression model showed that, compared to patients with BD-NPS, those with BD-PS had a longer duration of hospitalization ( $p=0.007$ ) and were more frequently hospitalized for a manic episode ( $p=0.001$ ). In addition, subjects with BD-PS had a lower score on the current Global Assessment of Functioning (GAF) ( $t = 3.157$ ;  $p = 0.002$ ) and were more frequently males ( $\chi^2 = 4.061$ ;  $p = 0.044$ ; OR = 1.399).