incorrect treatment for their diseases. This will change the game for the management of patients.

Disclosure: No significant relationships.
Keywords: RNA editing; Blood biomarker; diagnosis; bipolar disorder

O009

Lithium treatment and estimate glomerular filtration rate in bipolar disorder patients: A cross-sectional study

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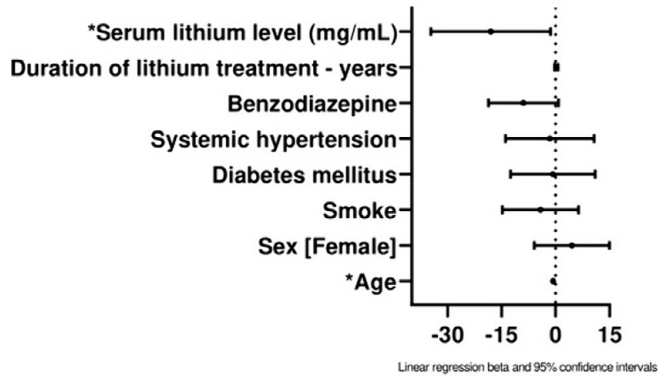
Introduction: Lithium has been the mainstay therapy for bipolar disorder (BD) for decades, but there is little consensus regarding its possible effects on kidney function and the rate of change in estimated glomerular flow rate (eGFR) over time.
Objectives: To describe patients with BD regarding their renal function and their sociodemographic and clinical characteristics potentially related to eGFR.
Methods: This is a cross-sectional study with an initial sample of 95 patients with BD. Multiple linear regression analysis was applied to investigate the association of lithium serum levels and their duration of treatment with eGFR, independent of confounding factors. We excluded patients without data regarding any of the variables from the final model.
Results: In the multivariable analysis, the model was composed of eight variables (Figure 1). The mean duration of treatment was 10 years (Figure 2). Serum lithium level was associated with low levels of eGFR (β = -18.06 [-34.70 - -1.42], p = 0.03); among the other variables, only age remained associated with it (β = -0.72 (-1.10 - -0.33), p = <0.01).

Figure 1 – Forest plot of multivariate analysis



Note: *P<0.05

Figure 2: Description of the study sample

Age (years) - median (IIQ)	**49.0 (37.0— 57.5)**
Female - n (%)	76 (80.0)
Race	
White	20 (21.1%)
Black	75 (78.9%)
BMI - median (IIQ)	28.4 (24.2—32.8)
Smoke - n (%)	20 (21.1)
Systemic hypertension - n (%)	11 (11.6)
Diabetes Mellitus - n (%)	14 (14.7)
Dyslipidemia - n (%)	10 (10.5)
Antipsychotic use - n (%)	67 (70.5)
Anticonvulsant use - n (%)	53 (55.8)
Benzodiazepine use - n (%)	21 (22.1)
BD Types	
BD type I	85 (89.5%)
BD type II	10 (10.5%)
Serum lithium levels (mg/ml)* - median (IIQ)	0.7 (0.6—0.9)
Lithium treatment duration - years	10.0 (6.0—16.0)
Daily lithium dosis	900.0 (900.0— 1200.0)
Serum urea	25.0 (21.0—29.5)
Serum creatinine	0.8 (0.7— 1.0)

*Only 83 patients

Conclusions: We replicated the correlation between serum lithium levels and eGFR. Our results contradict the claim that duration of treatment with lithium correlates with lower levels of eGFR, while suggesting serum lithium level could be a possible early marker of lithium nephrotoxicity.

Disclosure: No significant relationships.
Keywords: bipolar disorder; serum lithium level; lithium; nephrotoxicity

O010

Prospective early warning signals to detect transitions to manic and depressive episodes in bipolar disorder

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Introduction: For patients with bipolar disorder, early recognition of impending mood episodes is crucial to enable timely intervention. Longitudinal digital mood monitoring using ecological momentary assessment (EMA) enable prospective study of early warning signals (EWS) in momentary affective estates prior to symptom transitions.
Objectives: The present study examined in a unique longitudinal EMA data set whether EWS prospectively signal transitions to manic or depressive episodes.
Methods: Twenty bipolar type I/II patients completed EMA questionnaires five times a day for four months (average 491 observations per person), as well as weekly symptom questionnaires concerning depressive (Quick Inventory for Depressive

Symptomatology) and manic (Altman Self-Rating Mania Scale) symptoms. Weekly data was used to determine transitions (i.e., abrupt increase in symptoms). Prior to these transitions, EWS (autocorrelation at lag-1 and standard deviation) were calculated in moving windows over 17 affective EMA states. Kendall's tau was calculated to detect significant rises in the EWS indicator prior to the transition.
Results: Eleven patients reported one or two transitions to a mood episode. All transitions were preceded by at least one EWS. Average sensitivity for detecting EWS was slightly higher for manic episodes (36%) than for depressive episodes (25%). For manic episodes, EWS in thoughts racing, being full of ideas, and feeling agitated showed the highest sensitivity and specificity, whereas for depression, only feeling tired showed high sensitivity and specify.
Conclusions: EWS show promise in anticipating transitions to mood episodes in bipolar disorder. Further investigation is warranted.

Disclosure: No significant relationships.
Keywords: prediction; bipolar disorder; early warning signals; experience sampling methodology

O011

Psychiatric hospital utilisation following lithium discontinuation in patients with bipolar I or II disorder: A mirror-image study based on the lisie retrospective cohort

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Introduction: Evidence for lithium as a maintenance treatment for bipolar disorder type II remains limited since most treatment-prevention studies focus on bipolar disorder type I or do not distinguish between types of bipolar disorder.
Objectives: To compare the impact of lithium discontinuation on hospital utilisation in patients with bipolar disorder type I or schizoaffective disorder and patients with bipolar disorder type II or other bipolar disorder.
Methods: Mirror-image study, examining hospital utilisation within two years before and after lithium discontinuation as part of LiSIE, a retrospective cohort study into effects and side-effects of lithium for the maintenance treatment of bipolar disorder as compared to other mood stabilisers.
Results: For the whole sample, the number of admissions increased from 86 to 185 admissions after lithium discontinuation, with the mean number of admissions/patient/review period doubling from 0.44 to 0.95 ($p < 0.001$). The number of bed days increased from 2218 to 4240, with the mean number of bed days/patient/review period doubling from 11 to 22 ($p = 0.025$). This increase in admissions and bed days was exclusively attributable to patients with bipolar disorder type I or schizoaffective disorder.
Conclusions: Our findings suggest that due to a higher relapse risk in patients with bipolar disorder type I or schizoaffective disorder there is a need to apply a higher threshold for discontinuing lithium than for patients with bipolar disorder type II or other bipolar disorder.

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Keywords: bipolar disorder; lithium; Admission; mood stabiliser

O012

Self-injurious behaviour in patients with bipolar disorder and attention deficit hyperactivity disorder after central stimulant start– a retrospective study based on the lisie cohort

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Introduction: Currently, our understanding remains limited of how co-occurring bipolar disorder and attention deficit hyperactivity disorder (ADHD) should be treated.
Objectives: To evaluate the impact of central stimulant treatment on self-injurious behaviour in patients with a dual diagnosis of bipolar disorder or schizoaffective disorder and ADHD.
Methods: Retrospective cohort study (LiSIE) into effects and side-effects of lithium as compared to other mood stabilisers. Here, using a mirror-image design, we compared suicide attempts and non-suicidal self-injury events within 6 months and 2 years before and after central stimulant treatment start.
Results: Of 1564 eligible patients, 206 patients met inclusion criteria; having a dual diagnosis of bipolar disorder or schizoaffective disorder and ADHD at first central stimulant initiation. In these, suicide attempts and non-suicidal self-injury events decreased significantly within both 6 months ($p = 0.004$) and 2 years ($p = 0.028$) after central stimulant start. After multiple adjustments, this effect was preserved 2 years after central stimulant start (OR 0.63, 95% CI; 0.40 – 0.98, $p = 0.041$).
Conclusions: Central stimulant treatment may reduce the risk of self-injurious behavior in patients with a dual diagnosis of bipolar disorder or schizoaffective disorder and ADHD. However, to reduce the risk of manic switches, concomitant mood stabilising treatment remains warranted.