

## INTERLEUKIN-6 AS A BIOMARKER OF THE MODEL OF STAGING IN BIPOLAR DISORDER

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**Introduction:** Different proposals of the staging model in bipolar disorder (BD) have been launched suggesting a progression from prodromal to more severe and refractory presentations. Biochemical variations in BD are receiving attention as they may help to understand the neurobiological correlates of the disorder and its neuroprogression.

**Objectives:** Study pro-inflammatory factors, such as interleukins along the progression of the disorder.

**Aims:** To investigate a) the role of interleukin-6 (IL-6) in the model of staging and b) to detect clinical predictors of variations in IL-6 levels.

**Methods:** This is a case-control study matched for age and gender. Patients required the diagnosis confirmation by SCID, being in euthymia (HDRS, YMRS scores  $\leq 7$  in last month), and were classified in Kapczinski et al. clinical stages. At the end, 109 patients and 25 controls were eligible for the study. Serum IL-6 levels were determined by ELISA.

**Results:** Seventy-six (69.7%) patients were female and the mean age was 44.2 (SD= 12.9) years. A significant increase in IL-6 was found in patients compared to controls ( $t=2.33$ ,  $p=0.02$ ) and among the four groups of patients ( $F=2.85$ ,  $p=0.04$ ). Results from linear regression analysis revealed that number of episodes per year, age at first episode, and age were significantly associated with IL-6 ( $\beta=0.025$ , CI: 0.005-0.044,  $p=0.012$ ;  $\beta=-0.016$ , CI:(-0.031)-(-0.001),  $p=0.033$ ;  $\beta=0.042$ , CI:0.027-0.058,  $p=0.0001$ , respectively).

**Conclusions:** Interleukin-6 may be a useful biomarker in the model of staging in bipolar disorder and could be related to the number of episode per year and early onset of the disorder.