

P01-42 - G72/G30 CANDIDATE GENE FOR BIPOLAR I DISORDER IS NOT ASSOCIATED WITH PSYCHOSIS IN THE ROMANIAN POPULATION

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Background: The *G72/G30* gene is one of the common loci shared both by schizophrenia and bipolar disorder. Studies accumulating since the discovery of this gene complex in 2002 produced controversial results in both disorders in different populations.

Objective: We investigated the association between *G72/G30* gene and bipolar I disorder (BPI) in the Romanian population paying special attention to the association of *G72/G30* locus with lifetime psychosis in BPI patients.

Method: Fourteen *G72*-SNPs were genotyped in a Romanian sample of 198 BPI patients and 180 controls screened for psychiatric disorders in the Institute of Human Genetics, Life & Brain Center of the University of Bonn, Germany. Statistical analysis was performed with FAMHAP and Haploview-v3.32. The significance level of the results was corrected for multiple testing through permutations in 100,000 Monte Carlo simulations.

Results: None of the fourteen SNPs was associated with the global diagnosis of BPI in our total patient sample or with the psychotic BPI subtype. But four SNPs reached nominal significance in the non-psychotic BPI subgroup [rs3916965 (M12) ($P=0.044$), rs1935057 ($P=0.037$), rs3916967 (M14) ($P=0.043$), rs2391191 (M15, non-synonymous) ($P=0.043$)]. In the non-psychotic subgroup, the haploblock including M14 and M15 (GA) remained significantly associated with BPI after correction through permutations ($P=0.0524$; OR=1.82).

Conclusion: Our results are the first replication of the study by Williams et al. (2006) reporting the same *G72*-SNPs [M12(A) and the functional SNP M15(A)], with the same alleles, to be associated with non-psychotic BPI disorder .