

Brain arousal regulation in carriers of bipolar disorder risk alleles

Philippe Jawinski^{1,2,3}, Christian Sander^{1,2,3}, Nicole Mauche^{1,2}, Janek Spada^{2,3}, Jue Huang², Anna Schmidt^{1,2}, Madlen Häntzsch^{1,4}, Ralph Burkhardt^{1,4}, Markus Scholz^{1,5}, Ulrich Hegerl^{1,2,3}, Tilman Hensch^{1,2}

¹ LIFE – Leipzig Research Center for Civilization Diseases, University of Leipzig, Germany

² Department of Psychiatry and Psychotherapy, University of Leipzig, Germany

³ Depression Research Centre of the German Depression Foundation, Leipzig, Germany

⁴ Institute of Laboratory Medicine, Clinical Chemistry and Molecular Diagnostics, University Hospital Leipzig, Germany

⁵ Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig, Germany

Table S2 Replication Sample: BD genotypes and repeated-measures ANCOVA results for vigilance regulation

Chr	Locus	Gene ^a	SNP	Minor allele (A)	OR from literature for minor allele	OR Reference	Genotyping				Genotype frequencies AA/AB/BB	Genotype main effect			Genotype x time on task		
							IS	CR ^b	MAF	HWE		<i>F</i> (<i>df</i>)	η_p^2	<i>p</i>	<i>F</i> (<i>df</i>)	η_p^2	<i>p</i>
1	1p32.1	NF1A	rs472913	C	1.18	Scott et al. (2009)	.999	.994	.429	.865	94/246/166	0.140 (2,500)	.001	.870	0.735 (5,6,1408,4)	.003	.613
12	12p13.33	CACNA1C	rs1006737	A	1.18	Ferreira et al. (2008)	1 (typed)	1	.321	.188	59/209/241	0.316 (2,503)	.001	.729	1.001 (5,6,1418,4)	.004	.421

Chr Chromosome, SNP Single Nucleotide Polymorphism, OR Odds Ratio, IS IMPUTE2 info-score, CR call rate, MAF minor allele frequency, HWE *p*-value Hardy-Weinberg Equilibrium, NF1A nuclear factor 1 A-type, CACNA1C alpha-1C subunit of the L-type voltage-gated calcium channel

Covariates: sex, age, daytime of EEG-assessment

^a Most relevant gene listed

^b Considering a posterior probability of best guess genotype $\geq .995$