

AS07-04 - SUICIDE RISK WITH ANTIDEPRESSANTS: A NEED FOR GENE HUNTING ?

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Suicidal ideation and behaviors during antidepressant treatment have recently been the focus of several candidate gene and genome-wide association studies. Several genes have thus been highlighted as possible predictors of treatment-related suicidal events among which: genes involved in the neurotrophic and synaptic plasticity systems (CREB1, and BDNF and its receptor NTRK2), noradrenergic system (ADRA2A), glutamatergic system (GRIA3, GRIK2 and GDA), inflammatory and hypothalamic-pituitary-adrenal (HPA) axis systems (IL28RA and FKBP5) and in other brain functions (PAPLN, APOO, KCNIP4 and ELP3). Although some of these genes and related networks may help identifying individuals at risk for antidepressant induced suicidal ideation they still need to be validated in other samples specifically designed to investigate such an issue. Indeed several methodological issues are at play and question the use of these genetic variants as real predictors of these events: differences in phenotype definition across studies, the use of scales not designed to measure suicidal ideation; the rarity of true suicidal events (suicide attempts and/or completion) in pharmacogenomic studies; and the small sample size of these studies among others. There is thus clearly a need for better phenotypically designed studies with sample size large enough to detect true genetic variants.