

P03-293

ALCOHOL AND ALDEHYDE DEHYDROGENASE POLYMORPHISMS AND RISK FOR SUICIDE

A. Hishimoto, K. Mouri, M. Fukutake, K. Shirowa

Dept. of Psychiatry, Kobe Univ. Graduate School of Medicine, Kobe, Japan

Excessive alcohol consumption plays a crucial role in the pathogenesis of suicide. Because certain functional alleles of alcohol dehydrogenase (*ADH1B*) and mitochondrial aldehyde dehydrogenase (*ALDH2*) genes affect alcohol consumption, we explored associations of the *ADH1B* and *ALDH2* genetic variants with suicide in 317 Japanese males. We found the active *ALDH2* allele was significantly more frequent in the completed suicides. Individuals bearing alcoholism-susceptible homozygotes at both loci have 6 times greater risk for suicide. Our data show the genetic impact of the two polymorphisms on suicidal behaviour and presence of the active *ALDH2* allele may increase the risk for suicide.