



# No relationship found between -1438A/G polymorphism of the serotonin 2A receptor gene (rs6311) and major depression susceptibility in a northeastern Thai population

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**ABSTRACT.** Several lines of evidence suggest a molecular role of -1438A/G single nucleotide polymorphism in the *5-HTR2A* gene promoter (rs6311) in regulating the expression of this gene, making rs6311 polymorphism a promising candidate for an association study. We looked for a possible association between rs6311 polymorphism and major depressive disorder (MDD) in a northeastern Thai population. We included 180 patients with MDD and 183 unrelated healthy controls in our study. Genotyping was performed using PCR-RFLP. We found no significant differences between the two groups with

regard to both genotype distributions ( $\chi^2 = 1.32$ , d.f. = 2, P = 0.516) and allele frequencies ( $\chi^2 = 0.01$ , d.f. = 1, P = 0.913, odds ratio = 0.96, 95% confidence interval = 0.67-1.39). Therefore, this single nucleotide polymorphism appears not to be involved in the etiology of MDD.

**Key words:** Major depressive disorder; Association study; Rs6311; Serotonin 2A receptor; Single nucleotide polymorphism; Thai population