

Association between the -1438A/G polymorphism of the serotonin 2A receptor gene and late-onset psoriasis in a Thai population

C. Ronpirin¹, T. Tencomnao² and J. Wongpiyabovorn^{3,4}

¹Department of Preclinical Science, Faculty of Medicine, Thammasat University, Pathumthani, Thailand

²Center for Excellence in Omics-Nano Medical Technology Project Development, Department of Clinical Chemistry, Faculty of Allied Health Sciences, Chulalongkorn University, Bangkok, Thailand

³Immunology Unit, Department of Microbiology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

⁴Lupus Research Unit, Chulalongkorn University, Bangkok, Thailand

Corresponding author: C. Ronpirin

E-mail: cronpirin@yahoo.com; cronpirin@hotmail.com

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ABSTRACT. Expression of serotonin 2A receptor (*5-HTR2A*) is known to increase in psoriasis, a chronic inflammatory skin disease. We investigated a possible association between the -1438A/G single nucleotide polymorphism (rs6311) in the promoter region of *5-HTR2A* gene and psoriasis in a Thai population. One hundred and twelve psoriatic patients and 151 unrelated healthy controls were included in our study. Genotyping was performed using the polymerase chain reaction and restriction fragment length polymorphism techniques. We found no overall differences in genotype distributions and allele frequencies when comparing between the two groups. When we analyzed a subset of psoriatic patients classified by onset and severity, only the -1438A allele was significantly increased in patients with late-onset psoriasis when compared with the healthy control group ($\chi^2 = 4.77$, d.f. = 1, $P = 0.029$, odds ratio = 2.298 [95% confidence interval =

1.126-4.691]). This single nucleotide polymorphism may be involved in late-onset psoriasis in this Thai population.

Key words: Psoriasis; Psoriasis subtype; Association study; Serotonin 2A receptor; Single nucleotide polymorphism; Thai population