*HLA-B*13:01* pharmacogenetics database of dapsone-induced SCARs in Thailand and Asian population

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Dapsone is antibiotic and anti-inflammatory which is widely used for treatment such as leprosy. However, dapsone cause severe cutaneous adverse reactions (SCARs) include Stevens–Johnson syndrome (SJS), toxic epidermal necrolysis (TEN) and drug rash with eosinophilia and systemic symptoms (DRESS), approximately 0.5-3.6% of patients treated with dapsone and 9.9% mortality rate. From the previous studies, only *HLA-B*13:01* allele has a strongly association with dapsone-induced SCARs in Asian population. Moreover, the distribution of *HLA* alleles that play important roles in predicting adverse drug reactions in each population. Thus, this study was to investigate the distribution of *HLA-B*13:01* allele in Thai and Asian population and importance of this pharmacogenetics marker. We recruited 200 unrelated healthy Thai individuals in this study. *HLA-B* were genotyped using sequence-specific oligonucleotides (PCR-SSOs). We found a total of 57 alleles of *HLA-B* in Thai population. For *HLA-B*, *HLA-B*46:01* (11.75%) was the predominant allele commonly found in Thais. Furthermore, the allele frequencies of *HLA-B* were *HLA-B*46:01, HLA-B*15:02, HLA-B*13:01, HLA-B*4001, HLA*-and *B*38:02* (11.75%, 9.25%, 6.25%, 6.25% and 5.50%), respectively. This study showed that the frequency of *HLA-B*13:01* allele was similar to the previous study in Thai population. Many publications presented varying distributions of *HLA-B*13:01* in Asians including 9.15% of Han Chinese, 6.67% of Japanese and 5.94% of Vietnamese. Therefore, pharmacogenetics database containing distribution of *HLA-B* alleles will support the screening of dapsone-induced SCARs in Thai and Asian population.

KEYWORDS: *HLA-B*13:01*, alleles frequency, Dapsone-induced SCARs, Thai population

Biography

Monzporn Leelakajonjit is a grade11 student from Satit Pattana secondary school. I had interested about medicine and doing research about pharmacogenetics. From this experience I have learn the process of research and methodology. Chemistry and Biology is my favorite subject at school and I am keen to find out more about it in the future. Oral presentation in this conference will be a huge support for my university entrance.

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