



CYP3A5 gene mutation and effect on tacrolimus blood level

Sora Yasri^{1*}, Viroj Wiwanitkit²

¹KMT Primary Care Center, Bangkhae, Bangkok, Thailand

²Visiting professor, Hainan Medical University, Hainan Sheng, China

*Correspondence to

Sora Yasri,

Email: sorayasri@outlook.co.th

Received 26 April 2017

Accepted 19 June 2017

Published online 30 June 2017

Key Point

Variation in tacrolimus blood level may be due to epigenetic process.

Keywords: Tacrolimus, Renal transplantation, CYP3A5 gene, Gene mutation

Citation: Yasri S, Wiwanitkit V. CYP3A5 gene mutation and effect on tacrolimus blood level. Immunopathol Persa. 2018;4(1):e03. DOI: 10.15171/ipp.2018.03.



Tacrolimus is an important drug for renal transplant patients (1). The appropriate therapeutic level is required for proper case management. There are several factors affecting the administration of tacrolimus. The effect of genetic polymorphism is widely mentioned at present (2). The effect of polymorphism of the CYP3A5 is widely discussed (2). Recently, Nair et al recently proposed that “most patients carried the mutant allele CYP3A5*3 (A6986G)” and “tacrolimus drug blood level associated well with presence or absence of CYP3A5 polymorphisms” (2). Here, the authors try to use standard bioinformatics technique to assess the effect of mutant allele, CYP3A5*3 (A6986G). The previous published standard gene ontology analysis method namely GoFigure for assessment of biological process is used (3-5). In brief, the bioinformatics analysis tool used the computational algorithm for searching, analysis and data collection on the main biological process of input naïve and mutant alleles (3-5). Based on the assessment, there is no different in biological process for naïve and mutant types. This negative finding confirms that there should be no effect of mutation on phenotypic expression. The observation of variation of tacrolimus drug level should be due to epigenetic process (6).

Authors' contribution

Both authors wrote the manuscript equally.

Conflicts of interest

The authors declared no competing interests.

Ethical considerations

Ethical issues (including plagiarism, misconduct, data fabrication, falsification, double publication or submission, redundancy) have been completely observed by the authors.

Funding/Support

None.

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