CYP3A5 gene mutation and effect on tacrolimus blood level

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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.

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