Risk Assessment and Molecular Mechanism Study of Drug-drug Interactions Between Rivaroxaban and Tyrosine Kinase Inhibitors Mediated by CYP2J2/3A4 and BCRP/P-gp

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The establishment methods of transfected cells.

The establishment of ABCG2-MDCK cells: The lentivirus containing HBLV-NC-PURO (control) and MDCK-h-ABCG2-HIS-PURO (target) was used to transfect MDCK cells. After 48 h of infection, uninfected cells were killed by adding and maintaining 3 μg/ mL puromycin. Finally, the stable strain of ABCG2 with stable expression was obtained under the maintenance of puromycin. The overexpression effect was detected in MDCK cells by qPCR, and the overexpression fold was about 119484 times.

The establishment of MDR1-MDCK cells: The plasmid pcDNA3.1(+)/MDR1 was transfected into MDCK cell line using LipofectamineTM 2000 transfection reagent. Several stable transfected clones were obtained after selection with G418. The mRNA and protein levels were detected by using RT-PCR and Western blot, respectively(LiuYu and Zeng, 2009).

Supplementary Figure

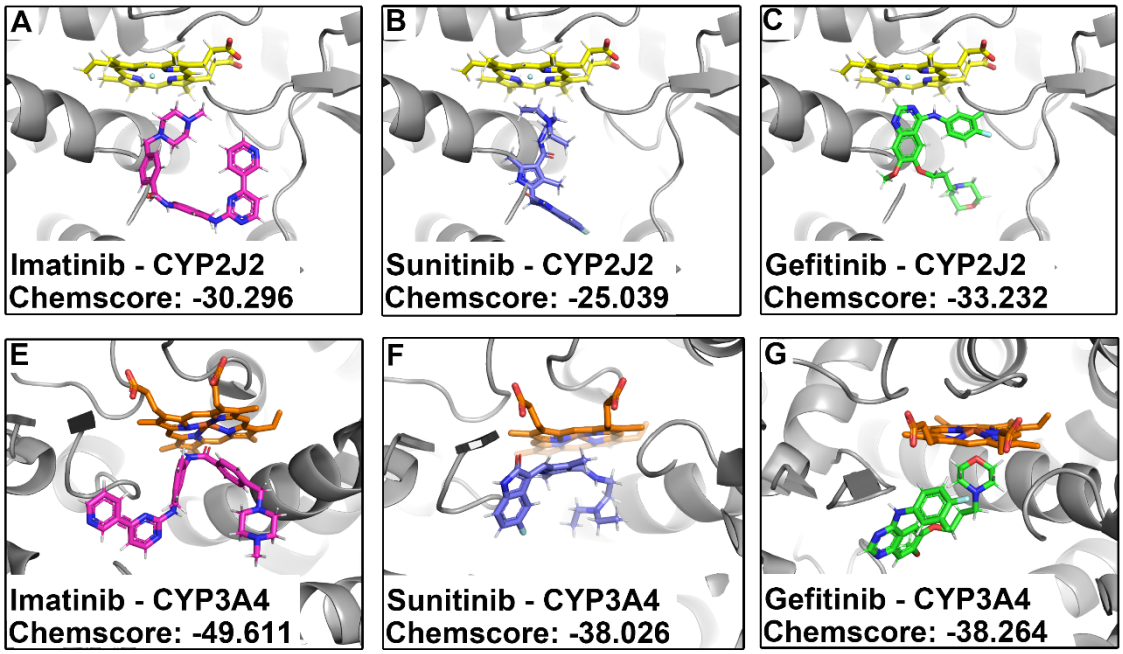

Figure S1. Molecule docking simulations of imatinib(A), sunitinib(B) and gefitinib(C) with CYP2J2, and (D, E and F) with CYP3A4, respectively. Thanks again for your suggestion.

Liu, Y., Yu, C. N. and Zeng, S. (2009). Establishment of Madin-Darby canine kidney cell line with high P-glycoprotein expression. *Journal of Chinese Pharmaceutical Sciences*, 44(21), 1608-1613.