



Supplementary Materials: CYP1A2 mRNA Expression rather than Genetic Variants Indicate Hepatic CYP1A2 Activity

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Table S1. Sequences of primers and fluorophore-labelled probe oligonucleotides for real-time PCR assaying *CYP1A2* SNPs.

SNP	Sequence (5'-3')
-163C>A (rs762551)	Forward primer AGAGAGCCAGCGTTCATG
	Reverse primer TGATGCGTGTTCTGTGCT
	Wild-type probe FAM-CATGCGTCCTG <u>G</u> CCCCACAG-BHQ1
	Mutant probe FAM-CATGCGTCCTG <u>T</u> CCCCACAGG-BHQ2
-3860G>A (rs2069514)	Forward primer ATCAAGCTACACATGATCG
	Reverse primer GGTGACACCTGTAATTC
	Wild-type probe FAM-CCTCTC <u>G</u> GATTCAAGCAATTGTCATGC-BHQ1
	Mutant probe HEX-CCTCTC <u>A</u> GATTCAAGCAATTGTCATGC-BHQ2
2159G>A (rs2472304)	Forward primer GATCCAGAAGGAGCTGGG
	Reverse primer CACACAGCAGGCACATAAC
	Wild-type probe FAM-CAGGAGAAGCCTTG <u>A</u> ACCCAGG-BHQ1
	Mutant probe HEX-CAGGAGAAGCCTTG <u>A</u> ACCCAGG-BHQ2

FAM, HEX fluorophores, BHQ1, BHQ2 quenchers.

Table S2. The flowchart of data analysis obtained from liver tissues.

Association of CYP1A2 function (activity or mRNA expression) with genetic and non-genetic variables (multiple linear regression analysis)		
	Models 1 and 2	Models 3 and 4
Independent variables	Dependent variables	Dependent variables
CYP1A2 SNPs and non-genetic factors (sex, age, function reducing factors ^a , function increasing factors ^b)	→CYP1A2 activity in the liver	→CYP1A2 mRNA in the liver
CYP1A2 haplotypes and non-genetic factors (sex, age, function reducing factors ^a , function increasing factors ^b)	→CYP1A2 activity in the liver	→CYP1A2 mRNA in the liver
Association between CYP1A2 activity and mRNA expression (linear regression analysis)		
CYP1A2 mRNA in the liver →CYP1A2 activity in the liver		
CYP1A2 mRNA in leukocytes	→CYP1A2 activity in the liver	

^aCYP1A2 inhibitor (ciprofloxacin), amoxicillin+clavulanic acid therapy, chronic alcohol consumption; ^b CYP1A2 inducer.