

Table S5. Genomewide association studies of pharmacogenomic studies that have genomewide significance ($p < 5 \times 10^{-8}$) variants in SLC or ABC transporters.

Source	STUDY	PUBMED ID	FIRST AUTHOR	JOURNAL	STUDY	DISEASE/TRAIT	INITIAL SAMPLE SIZE	REPLICATION SAMPLE SIZE	REGION	CHR_ID	CHR_POS	REPORTED GENE(S)	MAPPED_GENE	STRONGEST SNP-RISK ALLELE	SNPS	CONTEXT	INTERGENIC	RISK ALLELE FREQUENCY	P-VALUE	PVALUE_MLOG	P-VALUE (TEXT)	OR or BETA	95% CI (TEXT)
GWAS Catalog	1	23233662	Ramsey LB	Blood	Genome-wide study of methotrexate clearance replicates SLC01B1.	Methotrexate clearance (acute lymphoblastic leukemia)	22 East Asian ancestry cases, 58 African ancestry, African American or Afro-Caribbean cases, 265 Hispanic or Latin American cases, 806 European ancestry cases, 127 cases	699 European ancestry cases	12p12.1	12	21224625	SLC01B1	SLC01B1	rs4149080-C	rs4149080	intron_variant	No	0.18	6.00E-21	20.221849		12	[NR] mL/min/m2 decrease
GWAS Catalog	2	2231829	Chasman DI	Circ Cardiovas Genet	Genetic determinants of statin-induced low-density lipoprotein cholesterol reduction: the Justification for the Use of Statins in Prevention: an Intervention Trial Evaluation Rosuvastatin (JUPITER)	Response to statins (LDL cholesterol change)	6,989 European ancestry individuals	NA	4q22.1	4	88117930	ABCG2	ABCG2	rs1481012-?	rs1481012	intron_variant	No	NR	2.00E-15	14.69897	(fractional LDL-C reduction)	5.1	[3.34-6.86] % decrease
GWAS Catalog	3	27500523	Zhou K	Nat Genet	Variation in the glucose transporter gene SLC2A2 is associated with glycemic response to metformin.	Response to metformin in type 2 diabetes (HbA1c reduction)	1,372 European ancestry individuals	9,184 European ancestry individuals, 1,196 African American ancestry individuals, 627	3q26.2	3	171007094	SLC2A2, GLUT2	SLC2A2	rs8192675-C	rs8192675	intron_variant	No	0.27	7.00E-14	13.154902		0.17	[0.13-0.21] unit increase
GWAS Catalog	4	19901119	Trevino LR	J Clin Oncol	Germline genetic variation in an organic anion transporter polypeptide associated with methotrexate pharmacokinetics and clinical effects.	Methotrexate pharmacokinetics (acute lymphoblastic leukemia)	315 European ancestry cases, 73 African American cases, 5 Asian ancestry cases, 247 cases	NA	12p12.1	12	21229685	SLC01B1	SLC01B1	rs11045879-T	rs11045879	intron_variant	No	0.16	8.00E-11	10.09691		1.8	[7.6-14.0] mL/min/m2 increase
GWAS Catalog	5	23118302	Chu AY	Circ Cardiovas Genet	Genome-wide association study evaluating lipoprotein-associated phospholipase A2 mass and activity at baseline and after rosuvastatin therapy.	Lipoprotein-associated phospholipase A2 activity change in response to statin therapy	2,673 European ancestry cases, 2,656 European ancestry controls	NA	4q22.1	4	88124179	ABCG2	ABCG2	rs2199936-A	rs2199936	intron_variant	No	0.11	2.00E-10	9.69897	(percent change)	2.8	[1.82-3.78] percent decrease
GWAS Catalog	6	18650507	Link E	N Engl J Med	SLC01B1 variants and statin-induced myopathy—a genome-wide study.	Response to statin therapy	85 European ancestry cases, 90 European ancestry controls	21 European ancestry cases, 16,643 European ancestry controls	12p12.1	12	21178615	SLC01B1	SLC01B1	rs4149056-C	rs4149056	missense_variant	No	0.13	2.00E-09	8.69897		4.5	[2.60-7.70]
Pubmed	7	26148204	Wanga V	Pharmacogenomics	Genomewide association study of tenofovir pharmacokinetics and creatinine clearance in AIDS Clinical Trials Group protocol A5202	Tenofovir pharmacokinetics	501 tenofovir arm, 548 abacavir arm	NA	6p22.2	6	25784253	SLC17A1	SLC17A1	rs12662869-?	rs12662869	intron_variant	No		7.10E-09	8.1487417			
Pubmed	8	25676789	Wen C	Clin Pharmacol Ther	Genome-wide association study identifies ABCG2 (BCRP) as an alloprinol transporter and a determinant of drug response	Alloprinol response	1,607 Europeans, 239 East Asians, 84 African Americans, 85 Latinos	NA	4q22.1	4	88169725	ABCG2	ABCG2	rs10011796-C	rs10011796	intron_variant	No	0.39	1.99E-08	7.7011469		0.2799	
GWAS Catalog	9	27400856	Legge SE	Mol Psychiatry	Genome-wide common and rare variant analysis provides novel insights into clozapine-associated neutropenia.	Clozapine-induced agranulocytosis/granulocytopenia in treatment-resistant schizophrenia	48 European ancestry cases, 18 European ancestry extreme cases, 5,583 European ancestry controls	161 cases, 249 clozapine-exposed controls, 947 unexposed controls	12p12.2	12	20930928	SLC01B7, SLC01B3	SLC01B3, SLC01B7	rs149104283-T	rs149104283	intron_variant	Yes	0.0152	2.00E-08	7.69897		4.3198	
GWAS Catalog	10	22610502	Kennedy RB	Hum Genet	Genome-wide analysis of polymorphisms associated with cytokine responses in smallpox vaccine recipients.	Immune response to smallpox (secreted IL-1beta)	Up to 512 European ancestry individuals, up to 199 African American individuals	NA	13q32.3	13	98733736	SLC15A1	SLC15A1	rs9582259-C	rs9582259	intron_variant	No		3.00E-08	7.5228787	(EA)		
GWAS Catalog	11	25935875	Varenhorst C	Eur Heart J	Effect of genetic variations on ticagrelor plasma levels and clinical outcomes.	AR-C124910XX levels in individuals with acute coronary syndromes treated with ticagrelor	1,794 European ancestry cases, 18 African and Asian ancestry cases	1,922 European ancestry cases, 19 African and Asian ancestry cases	12p12.1	12	21250045	SLC01A2, SLC01B1	SLC01B1, SLC01A2	rs113681054-T	rs113681054	intergenic_variant	Yes	0.184	4.00E-13	12.39794		0.062	[0.044-0.08] unit increase