

Supplement to:

Systematic Review of Pharmacogenetic Factors that Influence High-Dose Methotrexate Pharmacokinetics in Pediatric Malignancies

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Supplementary Materials: Table S1: Search query used by PubMed and Scopus for article identification.

Database	Search Query	Number of Hits	Date of Search
PubMed	((("methotrexate"[MeSH Terms] OR "methotrexate"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language] AND (((("enzym*"[Text Word] OR "enzymes"[MeSH Terms] OR "enzymes and coenzymes"[MeSH Terms] OR "transport*"[Text Word] OR "membrane transport proteins"[MeSH Terms] OR "gene*"[Text Word] OR "genes"[MeSH Terms] OR "renal*"[Text Word] OR "kidney*"[Text Word] OR "kidney"[MeSH Terms] OR "hepatic*"[Text Word] OR "liver"[Text Word] OR "liver"[MeSH Terms]) AND ("pharmacogen*"[Text Word] OR "pharmacogenetics"[MeSH Terms] OR "genetic variation"[MeSH Terms] OR "genetic*"[Text Word] OR "genetics, medical"[MeSH Terms] OR "genotype"[MeSH Terms] OR "mutation"[MeSH Terms] OR "mutation"[Text Word] OR "pharmacogenomic variants"[MeSH Terms] OR "polymorphism, genetic"[MeSH Terms] OR "polymorphism, single nucleotide"[MeSH Terms] OR "polymorphism*"[Text Word] OR "varia*"[Text Word])) NOT "review"[Publication Type]) AND "english"[Language]) AND (((("pharmacokinetic*"[Text Word] OR "pharmacokinetics"[MeSH Terms] OR "clearance"[Text Word] OR "elimination"[Text Word] OR "metabolic clearance rate"[MeSH Terms] OR "exposure"[Text Word] OR "area under curve"[MeSH Terms] OR "area under curve"[Text Word] OR "concentration*"[Text Word] OR "concentration-time"[Text Word] OR "plasma"[Text Word] OR "metabol*"[Text Word] OR "precision medicine"[Text Word] OR "precision medicine"[MeSH Terms] OR "modeling"[Text Word] OR "simulation"[Text Word] OR "personalized medicine"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language]) AND (((("pediatric*"[Text Word] OR "pediatrics"[MeSH Terms] OR "child*"[Text Word] OR "child"[MeSH Terms] OR "adolesc*"[Text Word] OR "adolescent"[MeSH Terms] OR "paediatric*"[Text Word] OR "infant*"[Text Word] OR "infant"[MeSH Terms] OR "teen*"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language])	437	11/16/2020

PubMed	<p>((("methotrexate"[MeSH Terms] OR "methotrexate"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language] AND (((("enzym*"[Text Word] OR "enzymes"[MeSH Terms] OR "enzymes and coenzymes"[MeSH Terms] OR "transport*"[Text Word] OR "membrane transport proteins"[MeSH Terms] OR "gene*"[Text Word] OR "genes"[MeSH Terms] OR "renal*"[Text Word] OR "kidney*"[Text Word] OR "kidney"[MeSH Terms] OR "hepatic*"[Text Word] OR "liver"[Text Word] OR "liver"[MeSH Terms]) AND ("pharmacogen*"[Text Word] OR "pharmacogenetics"[MeSH Terms] OR "genetic variation"[MeSH Terms] OR "genetic*"[Text Word] OR "genetics, medical"[MeSH Terms] OR "genotype"[MeSH Terms] OR "mutation"[MeSH Terms] OR "mutation"[Text Word] OR "pharmacogenomic variants"[MeSH Terms] OR "polymorphism, genetic"[MeSH Terms] OR "polymorphism, single nucleotide"[MeSH Terms] OR "polymorphism*"[Text Word] OR "varia*"[Text Word])) NOT "review"[Publication Type]) AND "english"[Language]) AND (((("pharmacokinetic*"[Text Word] OR "pharmacokinetics"[MeSH Terms] OR "clearance"[Text Word] OR "elimination"[Text Word] OR "metabolic clearance rate"[MeSH Terms] OR "exposure"[Text Word] OR "area under curve"[MeSH Terms] OR "area under curve"[Text Word] OR "concentration*"[Text Word] OR "concentration-time"[Text Word] OR "plasma"[Text Word] OR "metabol*"[Text Word] OR "precision medicine"[Text Word] OR "precision medicine"[MeSH Terms] OR "modeling"[Text Word] OR "simulation"[Text Word] OR "personalized medicine"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language]) AND (((("pediatric*"[Text Word] OR "pediatrics"[MeSH Terms] OR "child*"[Text Word] OR "child"[MeSH Terms] OR "adolesc*"[Text Word] OR "adolescent"[MeSH Terms] OR "paediatric*"[Text Word] OR "infant*"[Text Word] OR "infant"[MeSH Terms] OR "teen*"[Text Word]) NOT "review"[Publication Type]) AND "english"[Language])</p>	443	2/26/2021
Scopus	<p>((TITLE-ABS-KEY(methotrexate)) AND ((TITLE-ABS-KEY(enzym*) OR TITLE-ABS-KEY(transport*) OR TITLE-ABS-KEY(kidney*) OR TITLE-ABS-KEY(renal*) OR TITLE-ABS-KEY(liver) OR TITLE-ABS-KEY(hepatic*)) AND (TITLE-ABS-KEY(pharmacogen*) OR TITLE-ABS-KEY(polymorphism) OR TITLE-ABS-KEY(mutation) OR TITLE-ABS-KEY(varia*) OR TITLE-ABS-KEY(gene*) OR TITLE-ABS-KEY(geno*)))) AND (TITLE-ABS-KEY(clearance) OR TITLE-ABS-KEY(concentration) OR TITLE-ABS-KEY(elimination) OR TITLE-ABS-KEY(exposure) OR TITLE-ABS-KEY(metabo*) OR TITLE-ABS-KEY(pharmacokinetic*) OR TITLE-ABS-</p>	486	11/16/2020

	KEY(modeling) OR TITLE-ABS-KEY(simulation) OR TITLE-ABS-KEY(parameter*)) AND (TITLE-ABS-KEY(pediatric*) OR TITLE-ABS-KEY(child*) OR TITLE-ABS-KEY(adolesc*) OR TITLE-ABS-KEY(paediatric*) OR TITLE-ABS-KEY(teen*) OR TITLE-ABS-KEY(infant*)) AND (TITLE-ABS-KEY(cancer) OR TITLE-ABS-KEY(leukemia) OR TITLE-ABS-KEY(lymphoma) OR TITLE-ABS-KEY(osteosarcoma) OR TITLE-ABS-KEY(oncology) OR TITLE-ABS-KEY(neoplasm*)) AND NOT DOCTYPE(re) AND LANGUAGE(english))		
Scopus	((TITLE-ABS-KEY(methotrexate)) AND ((TITLE-ABS-KEY(enzym*) OR TITLE-ABS-KEY(transport*) OR TITLE-ABS-KEY(kidney*) OR TITLE-ABS-KEY(renal*) OR TITLE-ABS-KEY(liver) OR TITLE-ABS-KEY(hepatic*)) AND (TITLE-ABS-KEY(pharmacogen*) OR TITLE-ABS-KEY(polymorphism) OR TITLE-ABS-KEY(mutation) OR TITLE-ABS-KEY(varia*) OR TITLE-ABS-KEY(gene*) OR TITLE-ABS-KEY(geno*))) AND (TITLE-ABS-KEY(clearance) OR TITLE-ABS-KEY(concentration) OR TITLE-ABS-KEY(elimination) OR TITLE-ABS-KEY(exposure) OR TITLE-ABS-KEY(metabo*) OR TITLE-ABS-KEY(pharmacokinetic*) OR TITLE-ABS-KEY(modeling) OR TITLE-ABS-KEY(simulation) OR TITLE-ABS-KEY(parameter*)) AND (TITLE-ABS-KEY(pediatric*) OR TITLE-ABS-KEY(child*) OR TITLE-ABS-KEY(adolesc*) OR TITLE-ABS-KEY(paediatric*) OR TITLE-ABS-KEY(teen*) OR TITLE-ABS-KEY(infant*)) AND (TITLE-ABS-KEY(cancer) OR TITLE-ABS-KEY(leukemia) OR TITLE-ABS-KEY(lymphoma) OR TITLE-ABS-KEY(osteosarcoma) OR TITLE-ABS-KEY(oncology) OR TITLE-ABS-KEY(neoplasm*)) AND NOT DOCTYPE(re) AND LANGUAGE(english))	492	2/26/2021

Table S2: All available genes and polymorphisms included in the analysis for this systematic literature review.

Gene Name	Variants	Significant Findings?	Does variant increase exposure?	References
<i>ABCB1</i>	rs10244266	No	NA	29
<i>ABCB1</i>	rs10246878	No	NA	29
<i>ABCB1</i>	rs10260862	No	NA	29
<i>ABCB1</i>	rs10264990	No	NA	22, 29
<i>ABCB1</i>	rs10267099	No	NA	22
<i>ABCB1</i>	rs10268314	No	NA	29
<i>ABCB1</i>	rs10274587	No	NA	29
<i>ABCB1</i>	rs10276036	No	NA	22
<i>ABCB1</i>	rs10280101	No	NA	21, 22

<i>ABCB1</i>	rs1045642	No	Yes	20, 25, 26, 27, 34, 35, 38, 57
<i>ABCB1</i>	rs1055302	No	NA	29
<i>ABCB1</i>	rs10808071	No	NA	22
<i>ABCB1</i>	rs1128503	No	No	20, 21, 22, 27, 34, 38
<i>ABCB1</i>	rs1202171	No	NA	22, 29
<i>ABCB1</i>	rs1202172	No	NA	29
<i>ABCB1</i>	rs1202179	No	NA	21, 29
<i>ABCB1</i>	rs12535512	No	NA	29
<i>ABCB1</i>	rs13226726	No	NA	29
<i>ABCB1</i>	rs13229143	No	NA	29
<i>ABCB1</i>	rs13233308	No	NA	22, 29
<i>ABCB1</i>	rs17327624	No	NA	29
<i>ABCB1</i>	rs1922240	No	NA	29
<i>ABCB1</i>	rs2032582	No	Yes	21, 57
<i>ABCB1</i>	rs2214102	No	NA	29
<i>ABCB1</i>	rs2235013	No	NA	21, 29
<i>ABCB1</i>	rs2235035	No	NA	22
<i>ABCB1</i>	rs2235046	No	NA	29
<i>ABCB1</i>	rs2235048	No	NA	22, 29
<i>ABCB1</i>	rs2520464	No	NA	29
<i>ABCB1</i>	rs3789243	No	NA	22, 29
<i>ABCB1</i>	rs3842	No	NA	29
<i>ABCB1</i>	rs4148733	No	NA	29
<i>ABCB1</i>	rs4148734	No	NA	29
<i>ABCB1</i>	rs4148737	No	NA	22
<i>ABCB1</i>	rs4148738	No	NA	29
<i>ABCB1</i>	rs4148743	No	NA	29
<i>ABCB1</i>	rs6946119	No	NA	29
<i>ABCB1</i>	rs6961419	No	NA	29
<i>ABCB1</i>	rs6961649	No	NA	22
<i>ABCB1</i>	rs6961665	No	NA	22
<i>ABCB1</i>	rs6979885	No	NA	29
<i>ABCB1</i>	rs7789645	No	NA	29
<i>ABCB1</i>	rs9282564	Yes	Yes	20, 21
<i>ABCC1</i>	rs11075291	No	NA	22
<i>ABCC1</i>	rs12922588	No	NA	20
<i>ABCC1</i>	rs2074087	No	NA	27
<i>ABCC1</i>	rs215060	No	NA	20
<i>ABCC1</i>	rs2230671	No	No	27, 29
<i>ABCC1</i>	rs246219	No	NA	20, 22
<i>ABCC1</i>	rs246221	No	NA	20, 29

<i>ABCC1</i>	rs246240	No	NA	29
<i>ABCC1</i>	rs35592	No	NA	22, 29
<i>ABCC1</i>	rs3784862	No	NA	22, 27, 29
<i>ABCC1</i>	rs4148330	No	NA	20, 29
<i>ABCC1</i>	rs4148358	No	NA	20
<i>ABCC10</i>	rs1214748	No	NA	20
<i>ABCC10</i>	rs1214752	No	NA	20
<i>ABCC10</i>	rs831314	No	NA	20
<i>ABCC2</i>	rs12826	No	Yes* No	28, 29*
<i>ABCC2</i>	rs17222723	No	NA	36
<i>ABCC2</i>	rs1885301	No	NA	36
<i>ABCC2</i>	rs2002042	No	NA	22
<i>ABCC2</i>	rs2273697	No	No	20, 22, 27, 30, 35, 36
<i>ABCC2</i>	rs2756109	No	NA	22
<i>ABCC2</i>	rs2804402	No	NA	36
<i>ABCC2</i>	rs3740063	No	NA	22
<i>ABCC2</i>	rs3740065	Yes	Yes* No	22, 28, 29*, 30*, 31*
<i>ABCC2</i>	rs3740066	Yes	Yes* No	20, 27*, 29*
<i>ABCC2</i>	rs3740074	No	NA	22
<i>ABCC2</i>	rs4148398	No	NA	22
<i>ABCC2</i>	rs717620	Yes	Yes* No	20, 22, 23, 27, 28, 29, 30*, 31*, 32, 33, 34, 35, 36
<i>ABCC2</i>	rs7910642	No	NA	36
<i>ABCC2</i>	rs8187710	No	NA	36
<i>ABCC3</i>	rs10153257	No	NA	29
<i>ABCC3</i>	rs1051640	No	NA	29
<i>ABCC3</i>	rs11568591	No	NA	36
<i>ABCC3</i>	rs12051822	No	NA	29
<i>ABCC3</i>	rs12602161	No	NA	20, 29
<i>ABCC3</i>	rs12604031	No	NA	29
<i>ABCC3</i>	rs1541392	No	NA	29
<i>ABCC3</i>	rs1558288	No	NA	29
<i>ABCC3</i>	rs17562467	No	NA	29
<i>ABCC3</i>	rs17562516	No	NA	29
<i>ABCC3</i>	rs17563146	No	NA	29
<i>ABCC3</i>	rs1978153	No	NA	29
<i>ABCC3</i>	rs1989983	No	NA	36
<i>ABCC3</i>	rs2072365	No	NA	29
<i>ABCC3</i>	rs2107441	No	NA	20
<i>ABCC3</i>	rs2189595	No	NA	29
<i>ABCC3</i>	rs2277624	No	NA	29

ABCC3	rs2412332	No	NA	29
ABCC3	rs2412333	No	NA	20, 29
ABCC3	rs3785911	No	NA	29
ABCC3	rs3785912	No	NA	29
ABCC3	rs4148411	No	NA	29
ABCC3	rs4148412	No	NA	29
ABCC3	rs4148413	No	NA	29
ABCC3	rs4148416	No	NA	22
ABCC3	rs4148418	No	NA	29
ABCC3	rs4793665	Yes	No	20, 36
ABCC3	rs4793666	No	NA	29
ABCC3	rs7212045	No	NA	29
ABCC3	rs733392	No	NA	20, 29
ABCC3	rs739921	No	NA	29
ABCC3	rs739923	No	NA	29
ABCC3	rs757421	No	NA	29
ABCC3	rs8073706	No	NA	29
ABCC3	rs8075406	No	NA	29
ABCC3	rs8196	No	NA	29
ABCC3	rs879459	No	NA	29
ABCC3	rs9895420	Yes	No	36
ABCC4	rs10219913	Yes	Yes	28, 29
ABCC4	rs11568658	No	NA	37
ABCC4	rs1678392	No	No	28, 29
ABCC4	rs1764419	No	NA	37
ABCC4	rs2274407	No	Yes	27, 31, 37
ABCC4	rs2619312	No	No	28, 29
ABCC4	rs2993579	No	NA	37
ABCC4	rs3742106	No	NA	29, 37
ABCC4	rs3751333	No	NA	37
ABCC4	rs7317112	Yes	Yes	28, 29
ABCC4	rs868853	Yes	No	29, 31, 37
ABCC4	rs869951	No	NA	37
ABCC4	rs9302061	No	No	28, 29
ABCC4	rs9516519	Yes	Yes* No	28*, 29, 31
ABCC5	rs1520195	No	NA	36
ABCC5	rs562	No	NA	36
ABCC5	rs7627754	No	NA	36
ABCG2	rs12505410	Yes	No	22
ABCG2	rs13120400	Yes	Yes	22
ABCG2	rs13137622	Yes	No	22

<i>ABCG2</i>	rs1564481	No	NA	22
<i>ABCG2</i>	rs17731538	No	NA	22
<i>ABCG2</i>	rs2231137	No	Yes	31, 38
<i>ABCG2</i>	rs2231142	Yes	Yes	20, 23, 24, 25, 26, 27
<i>ABCG2</i>	rs2622604	No	NA	22
<i>ABCG2</i>	rs2622621	No	Yes	22, 29
<i>ABCG2</i>	rs2725252	No	No	22, 29
<i>ABCG2</i>	rs3114018	No	NA	22
<i>ABCG2</i>	rs6857600	No	NA	22
<i>ARID5B</i>	rs10821936	No	NA	21
<i>ARID5B</i>	rs4506592	No	NA	21
<i>ARID5B</i>	rs4509706	No	NA	21
<i>ARID5B</i>	rs4948487	No	NA	21
<i>ARID5B</i>	rs4948496	Yes	Yes	21, 32
<i>ARID5B</i>	rs4948502	No	NA	21
<i>ARID5B</i>	rs7089424	No	NA	21
<i>ATIC</i>	rs2372536	No	NA	45
<i>DHFR</i>	rs1105525	No	NA	27
<i>DHFR</i>	rs1643641	No	NA	43
<i>DHFR</i>	rs1650695	No	NA	43
<i>DHFR</i>	rs1650696	No	NA	43
<i>DHFR</i>	rs1650697	No	NA	27
<i>DHFR</i>	rs408626	No	NA	43
<i>DHFR</i>	rs442767	No	NA	43
<i>DHFR</i>	rs70991108	No	NA	75
<i>DHFR</i>	rs7387	No	NA	27
<i>FPGS</i>	rs10106	No	NA	21
<i>FPGS</i>	rs1544105	Yes	No	21, 44, 69, 70
<i>FPGS</i>	rs4451422	No	NA	21
<i>GGH</i>	rs11545076	No	-	68
<i>GGH</i>	rs11545077	No	Yes	68
<i>GGH</i>	rs11545078	No	Yes	68
<i>GGH</i>	rs1800909	No	Yes	68
<i>GGH</i>	rs3758149	Yes	Yes	20, 44, 68
<i>MTHFD1</i>	rs1076991	No	NA	21
<i>MTHFD1</i>	rs1950902	No	NA	21
<i>MTHFD1</i>	rs2236225	Yes	No	21, 35, 71
<i>MTHFD1</i>	rs745686	No	NA	21
<i>MTHFR</i>	rs1801131	No	Yes	23, 25, 26, 27, 28, 33, 34, 45, 46, 52, 57, 71, 72, 75, 76, 79, 80

<i>MTHFR</i>	rs1801133	Yes	Yes No*	23, 25, 26, 27, 28, 32, 33, 34, 35, 39, 42*, 43, 44, 45, 46, 47, 52, 57, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80
<i>MTR</i>	rs10925257	No	NA	21
<i>MTR</i>	rs12759827	No	NA	21
<i>MTR</i>	rs1805087	No	-	21, 35, 57
<i>MTR</i>	rs2853523	No	NA	21
<i>MTR</i>	rs3768142	No	NA	21
<i>MTR</i>	rs4659724	No	NA	21
<i>MTRR</i>	rs10380	No	NA	21
<i>MTRR</i>	rs1532268	No	NA	21
<i>MTRR</i>	rs162036	No	NA	21
<i>MTRR</i>	rs1801394	Yes	No	21, 28, 35, 57
<i>MTRR</i>	rs2966952	No	NA	21
<i>MTRR</i>	rs326120	No	NA	21
<i>MTRR</i>	rs3776455	No	NA	21
<i>SLC19A1</i>	rs1051266	Yes	Yes* No	20, 21, 22, 26*, 27, 28, 29*, 33, 34, 35, 38, 39, 40*, 41*, 42*, 43*
<i>SLC19A1</i>	rs1051296	Yes	Yes	67
<i>SLC19A1</i>	rs1131596	No	Yes	29, 38
<i>SLC19A1</i>	rs2838958	No	No	38
<i>SLC19A1</i>	rs3788200	No	Yes	29, 38
<i>SLC19A1</i>	rs4819128	No	NA	21
<i>SLC19A1</i>	rs61510559	Yes	No	23, 25, 45, 46, 47
<i>SLC19A1</i>	rs7499	No	NA	21
<i>SLC22A6</i>	rs10897310	No	No	29
<i>SLC22A6</i>	rs11231294	No	No	29
<i>SLC22A6</i>	rs3017670	No	NA	29
<i>SLC22A6</i>	rs4149172	No	No	29
<i>SLC22A6</i>	rs6591722	No	NA	29
<i>SLC22A8</i>	rs10792367	No	NA	29
<i>SLC22A8</i>	rs10897315	No	NA	29
<i>SLC22A8</i>	rs2187383	No	NA	29
<i>SLC22A8</i>	rs2276299	No	NA	21, 29
<i>SLC22A8</i>	rs3809069	No	NA	21, 29
<i>SLC22A8</i>	rs3948869	No	NA	29
<i>SLC22A8</i>	rs4149182	No	NA	29
<i>SLC22A8</i>	rs4149183	No	NA	21
<i>SLC22A8</i>	rs4963228	No	NA	29

SLC22A8	rs4963326	No	NA	29
SLC22A8	rs948980	No	NA	29
SLCO1A2	rs10505872	No	NA	29
SLCO1A2	rs10743413	No	NA	29
SLCO1A2	rs10770804	No	NA	29
SLCO1A2	rs10770805	No	NA	29
SLCO1A2	rs10841795	No	NA	29
SLCO1A2	rs10841803	No	NA	29
SLCO1A2	rs11045918	No	NA	29
SLCO1A2	rs11045919	No	NA	29
SLCO1A2	rs11045953	No	NA	29
SLCO1A2	rs11045961	No	NA	29
SLCO1A2	rs11045994	No	NA	29
SLCO1A2	rs11831407	No	NA	29
SLCO1A2	rs11837182	No	NA	29
SLCO1A2	rs12300594	No	NA	29
SLCO1A2	rs12319824	No	NA	29
SLCO1A2	rs16923597	No	NA	29
SLCO1A2	rs16923647	No	NA	29
SLCO1A2	rs2045938	No	NA	29
SLCO1A2	rs2045939	No	NA	29
SLCO1A2	rs2045940	No	NA	29
SLCO1A2	rs2306231	No	NA	29
SLCO1A2	rs2417977	No	NA	29
SLCO1A2	rs4148984	No	NA	29
SLCO1A2	rs4148988	No	NA	29
SLCO1A2	rs4149008	No	NA	29
SLCO1A2	rs4149009	Yes	No	27, 29, 48
SLCO1A2	rs4337089	No	NA	29
SLCO1A2	rs4762699	No	NA	29
SLCO1A2	rs4762818	No	NA	29
SLCO1A2	rs6487215	No	NA	29
SLCO1A2	rs7137767	No	NA	29
SLCO1A2	rs7301895	No	NA	29
SLCO1A2	rs7954757	No	NA	29
SLCO1A2	rs7962263	No	NA	29
SLCO1A2	rs7964783	No	NA	29
SLCO1B1	rs10444413	No	NA	22
SLCO1B1	rs10841753	Yes	Yes* No	38, 49*, 50
SLCO1B1	rs10841769	No	NA	21
SLCO1B1	rs11045787	Yes	Yes	49

SLCO1B1	rs11045813	Yes	Yes	50
SLCO1B1	rs11045818	Yes	Yes* No	21, 49*, 50*
SLCO1B1	rs11045819	Yes	No	51, 21
SLCO1B1	rs11045821	Yes	No	50
SLCO1B1	rs11045823	No	NA	21
SLCO1B1	rs11045825	Yes	No	50
SLCO1B1	rs11045870	Yes	No	50
SLCO1B1	rs11045872	Yes	No	22, 49, 50
SLCO1B1	rs11045879	Yes	Yes* No	22, 25*, 29, 33, 35*, 49, 50*, 52
SLCO1B1	rs11045892	Yes	No	50
SLCO1B1	rs11045897	Yes	Yes	38, 53
SLCO1B1	rs1463565	No	NA	22
SLCO1B1	rs16923647	Yes	No	50
SLCO1B1	rs17328763	Yes	Yes	49
SLCO1B1	rs2169969	Yes	No	50
SLCO1B1	rs2306283	Yes	Yes* No	27*, 33, 38, 54
SLCO1B1	rs2417955	No	NA	22
SLCO1B1	rs2900476	Yes	No	22, 49
SLCO1B1	rs34671512	Yes	No	51
SLCO1B1	rs4149026	No	NA	22
SLCO1B1	rs4149034	No	NA	22
SLCO1B1	rs4149035	No	No	22, 29
SLCO1B1	rs4149056	Yes	Yes	21, 22, 27, 28, 32, 33, 34, 35, 38, 43, 49, 50, 51, 52, 54, 55
SLCO1B1	rs4149057	No	NA	22
SLCO1B1	rs4149076	Yes	No	49
SLCO1B1	rs4149081	Yes	Yes* No	22*, 25*, 49, 50*, 53*
SLCO1B1	rs4363657	No	NA	21
SLCO1B1	rs59502379	Yes	Yes	51
SLCO1B1	rs7966613	No	Yes	49
SLCO1B3	rs1002441	No	NA	29
SLCO1B3	rs1017385	No	NA	29
SLCO1B3	rs10841648	No	NA	29
SLCO1B3	rs10841660	No	NA	29
SLCO1B3	rs10841661	No	NA	29
SLCO1B3	rs10841697	No	NA	29
SLCO1B3	rs11045512	No	NA	29
SLCO1B3	rs11045573	No	NA	29
SLCO1B3	rs11045585	No	NA	29
SLCO1B3	rs11045598	No	NA	29

<i>SLCO1B3</i>	rs12824715	No	NA	29
<i>SLCO1B3</i>	rs1304608	No	NA	29
<i>SLCO1B3</i>	rs1549968	No	NA	29
<i>SLCO1B3</i>	rs1581194	No	NA	29
<i>SLCO1B3</i>	rs1966648	No	NA	29
<i>SLCO1B3</i>	rs2117032	No	NA	29
<i>SLCO1B3</i>	rs2417886	No	NA	29
<i>SLCO1B3</i>	rs2417940	No	NA	29
<i>SLCO1B3</i>	rs4149117	No	NA	29
<i>SLCO1B3</i>	rs4149121	No	NA	29
<i>SLCO1B3</i>	rs4149132	No	NA	29
<i>SLCO1B3</i>	rs4382961	No	NA	29
<i>SLCO1B3</i>	rs4762803	No	NA	29
<i>SLCO1B3</i>	rs7311358	No	NA	29
<i>SLCO1B3</i>	rs7962265	No	NA	29
<i>SLCO1B3</i>	rs7973653	No	NA	29
<i>SLCO1B3</i>	rs975657	No	NA	29
<i>TYMS</i>	rs1004474	No	NA	21
<i>TYMS</i>	rs151264360	No	NA	75
<i>TYMS</i>	rs2612100	No	NA	21
<i>TYMS</i>	rs2790	Yes	No	48
<i>TYMS</i>	rs2853533	No	NA	21
<i>TYMS</i>	rs2853741	No	NA	21
<i>TYMS</i>	rs34489327	Yes	No	25, 34, 43
<i>TYMS</i>	rs34743033	Yes	No	25, 33, 34, 42, 43, 46, 57, 71
<i>TYMS</i>	rs9967368	No	NA	21

* Indicates the studies that showed increased MTX exposure when there were conflicting reports for a variant

NA; Not applicable. The study genotyped for the variant, but did not present any pharmacokinetic data.

- Pharmacokinetic data was presented. No observable nor statistical differences between the genotypes