

Table S1. Overview of previous studies in ALL on associations between SNPs and MTX levels, MTX-related toxicity

SNPs	High MTX levels/ Poor clearance		Hematotoxicity		Hepatotoxicity/ Nephrotoxicity		Mucositis		Other Toxicity	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<i>SLCO1B1</i> rs4149056	(+) ¹	2-5	(+) ¹	2, 3	(+) ¹	5	(+) ¹	4, 6		
	(-)*		(-)*							
<i>SLCO1B1</i> rs11045879	(+) ⁷⁻⁹	4, 5, 10				5	(-) ⁸	4		
<i>SLCO1B1</i> rs2306283	(+) ¹¹	4	(+) ¹¹		(+) ¹¹		(+) ¹¹	4		
<i>SLCO1B1</i> rs4149081	(+) ⁷⁻⁹						(-) ⁸			
	(-) ⁶									
<i>SLC19A1</i> rs2838958	(+)*	4		12				4, 12		12
<i>SLC19A1</i> rs3788200	(+)*	4, 10						4		
<i>ABCC2</i> rs3740065	(+) ¹⁰	13								
<i>ABCC2</i> rs717620	(+) ^{2, 13}	3, 10, 14, 15	(+) ^{2, 13}	3, 14		13, 15	(+) ¹³			13
<i>ABCC2</i> rs2273697		14		14	(+)*					
<i>ABCC4</i> rs9302061		10								
<i>ABCC4</i> rs7317112	(-) ⁶	10					(-) ⁶			
<i>MTRR</i> rs1801394	(+)*	16, 17		16, 17	(-)*	16		6, 17		16
	(-) ⁶									
<i>MTHFR</i> rs1801131	(+) ¹⁸	3, 5, 7, 15-17, 19-23	(+) ^{18, 22, 24-26}	3, 16, 19-21, 23, 30-32	(+) ^{18, 26}	15, 16, 19-21, 23, 30, 31, 33	(+) ²⁴	16, 17, 20, 21, 23, 30-33	(-) ³¹	16, 20, 23, 24, 32-34
			(-) ^{17, 27-29}		(-) ^{5, 27, 28}					
<i>MTHFR</i> rs1801133	(+) ^{5, 15, 17-19, 21, 35, 36}	2, 3, 7, 16, 20, 23, 37	(+) ^{3, 19, 21, 27, 29, 31, 36, 38}	2, 16, 17, 20, 23, 24, 28, 30, 32	(+) ^{5, 21, 26, 27, 36}	15-17, 19, 20, 23, 28, 30, 31, 33	(+) ^{17, 20, 24, 40}	16, 21, 23, 30-33	(+) ^{24, 26, 27, 34, 35}	16, 20, 23, 31-33
	(-) ²²		(-) ^{18, 22, 25, 39}		(-) ^{18, 39}		(-) ³⁷			

The numbers refer to the references. Other toxicity: toxicity score, nausea, vomiting, diarrhea, skin, and neurological toxicity; (+): Mutant-type is associated with high MTX plasma levels/ poor clearance/ toxicity; (-): Wild-type is associated with less toxicity; No: no association of SNPs with high MTX plasma levels/ poor clearance/ toxicity; *: association that was found in the current study.

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