

Table S2. TaqMan probes information

Gene	SNPs ID	Assay ID	Allelic change	Position (GRCh38.p12)	Transcript (minus strand)	Function	Residue change
<i>SLCO1B1</i>	rs4149056	C__30633906_10	T>C	chr12:21178615	NM_006446.5:c.521T>C	Missense Variant	p.Val174Ala
	rs2306283	C__1901697_20	A>G	chr12:21176804	NM_006446.5:c.388A>G	Missense Variant	p.Asn130Asp
	rs4149081	C__1901759_20	G>A	chr12:21225087	NM_006446.5:c.1865+248G>A	-	-
	rs11045879	C__31106904_10	T>C	chr12:21229685	NM_006446.5:c.1865+4846T>C	-	-
<i>SLC19A1</i>	rs2838958	C__1325132_20	G>A	chr21:45528653	NM_194255.4:c.1151+2117C>T	-	-
	rs3788200	C__1325139_10	A>G	chr21:45536657	NM_194255.4:c.189+1114T>C	-	-
<i>ABCC2</i>	rs3740065	C__22271640_10	A>G	chr10:99845936	NM_000392.5:c.4146+154A>G	-	-
	rs717620	C__2814642_10	C>T	chr10:99782821	NM_000392.5:c.-24=	-	-
	rs2273697	C__22272980_20	G>A	chr10:99804058	NM_000392.5:c.1249G>A	Missense Variant	p.Val417Ile
<i>ABCC4</i>	rs9302061	C__30550708_10	C>T	chr13:95314450	-	-	-
	rs7317112	C__29165801_20	A>G	chr13:95271269	NM_005845.5:c.75-23516T>C	-	-
<i>MTRR</i>	rs1801394	C__3068176_10	A>G	chr5:7870860	NM_002454.3:c.66A>G	Missense Variant	p.Ile22Met
<i>MTHFR</i>	rs1801131	C__850486_20	A>C	chr1:11794419	NM_005957.5:c.1286A>C	Missense Variant	p.Glu429Ala
	rs1801133	C__1202883_20	C>T	chr1:11796321	NM_005957.5:c.665C>T	Missense Variant	p.Ala222Val

Abbreviations: SNPs, Single nucleotide polymorphisms.

Table S3. SNPs, MTX levels at fixed time and MTX elimination delay

SNPs	n(%)	24h (μmol/L)	<i>P</i> ^a	48h (μmol/L)	<i>P</i> [*]	72h (μmol/L)	<i>P</i> [*]	MTX elimination delay			<i>P</i> ^b
		Median (IQR)		Median (IQR)		Median (IQR)		Yes	No	OR(95%CI)	
<i>SLCO1B1</i> rs4149056 T>C											
TC+CC	44(24.04)	46.80(30.87-93.42)		0.40(0.23-1.02)		0.10(0.03-0.35)		12(27.27)	32(72.73)	0.319(0.138-0.736)	
TT	139(75.96)	54.00(31.32-72.00)	0.708	0.73(0.32-2.70)	0.014	0.20(0.08-0.70)	0.019	68(48.92)	71(51.08)	1.000	0.007
<i>SLCO1B1</i> rs2306283 A>G											
AG+GG	172(93.99)	50.76(30.60-75.60)		0.58(0.28-2.70)		0.16(0.07-0.70)		75(43.60)	97(56.40)	4.409(0.841-23.114)	
AA	11(6.01)	54.00(39.96-92.88)	0.483	0.77(0.41-0.96)	0.807	0.08(0.05-0.23)	0.192	5(45.45)	6(54.55)	1.000	0.079
<i>SLCO1B1</i> rs4149081 G>A											
GA+AA	121(66.12)	50.04(30.42-82.08)		0.56(0.28-3.18)		0.17(0.07-0.82)		50(41.32)	71(58.68)	1.174(0.597-2.311)	
GG	62(33.88)	54.90(36.54-76.95)	0.684	0.63(0.35-1.56)	0.847	0.14(0.07-0.43)	0.497	30(48.39)	32(51.61)	1.000	0.642
<i>SLCO1B1</i> rs11045879 T>C											
TC+CC	125(68.31)	49.32(30.60-73.80)		0.56(0.28-12.97)		0.17(0.07-0.79)		52(41.60)	73(58.40)	1.084(0.543-2.163)	
TT	58(31.69)	57.60(37.71-92.88)	0.46	0.63(0.34-1.76)	0.803	0.14(0.07-0.48)	0.505	28(48.28)	30(51.72)	1.000	0.819
<i>SLCO19A1</i> rs2838958 G>A											
GA+AA	146(79.78)	55.72(31.68-95.04)		0.69(0.28-2.70)		0.19(0.07-0.68)		65(44.52)	81(55.48)	1.926(0.835-4.441)	
GG	37(20.22)	40.68(27.36-61.02)	0.016	0.5(0.31-1.58)	0.475	0.13(0.08-0.45)	0.801	15(40.54)	22(59.46)	1.000	0.124
<i>SLCO19A1</i> rs3788200 A>G											
AG+GG	149(81.42)	55.08(31.86-93.96)		0.63(0.29-1.80)		0.15(0.07-0.60)		69(46.31)	80(53.69)	1.025(0.456-2.304)	
AA	34(18.58)	40.32(24.12-63.00)	0.043	0.52(0.27-2.48)	0.76	0.15(0.08-0.80)	0.682	11(32.35)	23(67.65)	1.000	0.953
<i>ABCC2</i> rs3740065 A>G											
AG+GG	117(63.93)	54.00(31.86-95.04)		0.64(0.28-2.4)		0.16(0.08-0.67)		46(39.32)	71(60.68)	0.906(0.455-1.804)	
AA	66(36.07)	50.22(29.34-67.68)	0.375	0.52(0.29-1.79)	0.825	0.14(0.06-0.61)	0.653	34(51.52)	32(48.48)	1.000	0.778
<i>ABCC2</i> rs717620 C>T											
CT+TT	64(34.97)	47.70(31.41-84.42)		0.76(0.30-1.86)		0.20(0.07-0.56)		29(45.31)	35(54.69)	1.836(0.918-3.672)	
CC	119(65.03)	54.00(31.32-75.60)	0.85	0.55(0.28-2.40)	0.602	0.15(0.07-0.66)	0.92	51(42.86)	68(57.14)	1.000	0.086
<i>ABCC2</i> rs2273697 G>A											
GA+AA	64(34.97)	51.12(31.59-67.23)		0.91(0.35-1.91)		0.29(0.08-0.61)		29(45.31)	35(54.69)	1.371(0.578-3.251)	
GG	153(83.61)	52.92(31.32-92.88)	0.688	0.58(0.28-2.71)	0.65	0.67(0.06-0.67)	0.386	66(43.14)	87(56.86)	1.000	0.474

<i>ABCC4</i> rs9302061 C>T											
CT+TT	109(59.56)	52.92(31.50-92.88)		0.77(0.33-2.55)		0.19(0.08-0.61)		49(44.95)	60(55.05)	1.485(0.767-2.875)	
CC	74(40.44)	52.3831.14-69.57)	0.94	0.41(0.27-1.90)	0.096	0.12(0.05-0.71)	0.334	31(41.89)	43(58.11)	1.000	0.241
<i>ABCC4</i> rs7317112 A>G											
AG+GG	77(42.08)	50.76(31.14-80.28)		0.55(0.31-1.77)		0.16(0.07-0.60)		35(45.45)	42(54.55)	0.946(0.489-1.828)	
AA	106(57.92)	53.46(31.32-79.92)	0.871	0.64(0.28-2.79)	0.588	0.15(0.08-0.68)	0.639	45(42.45)	61(57.55)	1.000	0.868
<i>MTRR</i> rs1801394 A>G											
AG+GG	68(37.16)	53.46(33.30-92.88)		0.70(0.38-3.80)		0.195(0.09-0.95)		30(44.12)	38(55.88)	0.876(0.447-1.720)	
AA	115(62.84)	50.76(30.24-72.00)	0.634	0.54(0.27-1.42)	0.045	0.12(0.06-0.47)	0.072	50(43.48)	65(56.52)	1.000	0.702
<i>MTHFR</i> rs1801131 A>C											
AC+CC	49(26.78)	55.08(33.48-71.10)		0.77(0.34-3.90)		0.19(0.08-1.10)		25(51.02)	24(48.98)	1.056(0.513-2.170)	
AA	134(73.22)	47.52(30.51-92.88)	0.591	0.56(0.28-1.76)	0.156	0.15(0.07-0.61)	0.362	55(41.04)	79(58.96)	1.000	0.883
<i>MTHFR</i> rs1801133 C>T											
CT+CT	145(79.23)	50.04(30.96-90.72)		0.64(0.29-2.40)		0.16(0.07-0.62)		62(42.76)	83(57.24)	1.388(0.625-3.086)	
CC	38(20.77)	54.90(31.95-71.73)	0.795	0.59(0.27-1.78)	0.586	0.15(0.06-0.68)	0.769	18(47.37)	20(52.63)	1.000	0.421

Abbreviations: MTX, methotrexate; IQR, interquartile range; OR, odds ratio; and CI, confidence interval. a, *P* value was estimated by Mann–Whitney U test. b, *P* value was estimated by Fisher’s exact test.

Table S4. SNPs and MTX-related toxicity

SNPs	n(%)	Leukopenia			P	Neutropenia			P	Anemia			P	Thrombocytopenia			P
		Yes	No	OR(95% CI)		Yes	No	OR(95%CI)		Yes	No	OR(95%CI)		Yes	No	OR(95%CI)	
SLCO1B1 rs4149056 T>C																	
TC+CC	44(24.04)	38(86.36)	6(13.64)	2.527 (0.937-6.815)		36(81.82)	8(18.18)	3.172 (1.310-7.681)		24(54.55)	20(45.45)	1.059 (0.489-2.293)		28(63.64)	16(36.36)	1.451 (0.701-3.005)	
TT	139(75.96)	105(75.54)	34(24.46)	1.000	0.067	88(63.31)	51(36.69)	1.000	0.011	79(56.83)	60(43.17)	1.000	0.884	78(56.12)	61(43.88)	1.000	0.316
SLCO1B1 rs2306283 A>G																	
AG+GG	172(93.99)	133(77.33)	39(22.67)	0.303 (0.036-2.5475)		118(68.60)	54(31.40)	1.731 (0.493-6.081)		97(56.40)	75(43.60)	0.698 (0.185-2.642)		99(57.56)	73(42.44)	0.729 (0.201-2.645)	
AA	11(6.01)	10(90.91)	1(9.09)	1.000	0.272	6(54.55)	5(45.45)	1.000	0.392	6(54.55)	5(45.45)	1.000	0.597	7(63.64)	4(36.36)	1.000	0.631
SLCO1B1 rs4149081 G>A																	
GA+AA	121(66.12)	95(78.51)	26(21.49)	1.08 (0.506-2.304)		84(69.42)	37(30.58)	1.304 (0.673-2.526)		68(56.20)	53(43.80)	1.011 (0.512-1.995)		71(58.68)	50(41.32)	1.087 (0.577-2.048)	
GG	62(33.88)	48(77.42)	14(22.58)	1.000	0.843	40(64.52)	22(35.48)	1.000	0.431	35(56.45)	27(43.55)	1.000	0.976	35(56.45)	27(43.55)	1.000	0.797
SLCO1B1 rs11045879 T>C																	
TC+CC	125(68.31)	98(78.40)	27(21.60)	1.086 (0.502-2.351)		88(70.40)	37(29.60)	1.526 (0.781-2.982)		72(57.60)	53(42.40)	1.375 (0.685-2.761)		75(60.00)	50(40.00)	1.325 (0.695-2.525)	
TT	58(31.69)	45(77.59)	13(22.41)	1.000	0.834	36(62.07)	22(37.93)	1.000	0.216	31(53.45)	27(46.55)	1.000	0.371	31(53.45)	27(46.55)	1.000	0.392
SLCO19A1 rs2838958 G>A																	
GA+AA	146(79.78)	114(78.08)	32(21.92)	0.943 (0.365-2.436)		98(67.12)	48(32.88)	0.832 (0.363-1.909)		80(54.79)	66(45.21)	0.666 (0.277-1.601)		87(59.59)	59(40.41)	1.289 (0.596-2.788)	
GG	37(20.22)	29(78.38)	8(21.62)	1.000	0.904	26(70.27)	11(29.73)	1.000	0.665	23(62.16)	14(37.84)	1.000	0.364	19(51.35)	18(48.65)	1.000	0.519
SLCO19A1 rs3788200 A>G																	
AG+GG	149(81.42)	115(77.18)	34(22.82)	0.658 (0.240-1.805)		99(66.44)	50(33.56)	0.702 (0.0-2.98-1.65)		81(54.36)	68(45.64)	0.552 (0.229-1.331)		86(57.72)	63(42.28)	0.92 (0.421-2.012)	
AA	34(18.58)	28(82.35)	6(17.65)	1.000	0.416	25(73.53)	9(26.47)	1.000	0.417	22(64.71)	12(35.29)	1.000	0.185	20(58.82)	14(41.18)	1.000	0.835
ABCC2 rs3740065 A>G																	
AG+GG	117(63.93)	93(79.49)	24(20.51)	1.245 (0.572-2.707)		80(68.38)	37(31.62)	1.043 (0.527-2.063)		70(59.83)	47(40.17)	1.517 (0.746-3.085)		70(59.83)	47(40.17)	1.108 (0.58-2.115)	
AA	66(36.07)	50(75.76)	16(24.24)	1.000	0.581	44(66.67)	22(33.33)	1.000	0.904	33(50.00)	33(50)	1.000	0.250	36(54.55)	30(45.45)	1.000	0.756
ABCC2 rs717620 C>T																	
CT+TT	64(34.97)	49(76.56)	15(23.44)	0.89 (0.417-1.902)		42(65.63)	22(34.38)	0.906 (0.465-1.768)		40(62.50)	24(37.50)	1.377 (0.685-2.768)		41(64.06)	23(35.94)	1.54 (0.8-2.963)	
CC	119(65.03)	94(78.99)	25(21.01)	1.000	0.764	82(68.91)	37(31.09)	1.000	0.773	63(52.94)	56(47.06)	1.000	0.369	65(54.62)	54(45.38)	1.000	0.196
ABCC2 rs2273697 G>A																	
GA+AA	30(16.39)	25(83.33)	5(16.67)	1.757 (0.589-5.244)		21(70.00)	9(30.00)	1.214 (0.499-2.954)		17(56.67)	13(43.33)	1.424 (0.578-3.508)		13(43.33)	17(56.67)	0.513 (0.224-1.177)	
GG	153(83.61)	118(77.12)	35(22.88)	1.000	0.312	103(67.32)	50(32.68)	1.000	0.669	86(56.21)	67(43.79)	1.000	0.442	93(60.78)	60(39.22)	1.000	0.115

ABCC4 rs9302061 C>T																	
CT+TT	109(59.56)	90(82.57)	19(17.43)	2.091 (1-4.371)		76(69.72)	33(30.28)	1.251 (0.656-2.387)		58(53.21)	51(46.79)	0.681 (0.348-1.333)		65(59.63)	44(40.37)	1.1 (0.593-2.039)	
CC	74(40.44)	53(71.62)	21(28.38)	1.000	0.050	48(64.86)	26(35.14)	1.000	0.496	45(60.81)	29(39.19)	1.000	0.263	41(55.41)	33(44.59)	1.000	0.763
ABCC4 rs7317112 A>G																	
AG+GG	77(42.08)	61(79.22)	16(20.78)	1.298 (0.616-2.735)		49(63.64)	28(36.36)	0.691 (0.362-1.32)		43(55.84)	34(44.16)	1.126 (0.583-2.175)		43(55.84)	34(44.16)	0.769 (0.414-1.429)	
AA	106(57.92)	82(77.36)	24(22.64)	1.000	0.493	75(70.75)	31(29.25)	1.000	0.263	60(56.60)	46(43.40)	1.000	0.724	63(59.43)	43(40.57)	1.000	0.407
MTRR rs1801394 A>G																	
AG+GG	68(37.16)	52(76.47)	16(23.53)	0.929 (0.433-1.99)		47(69.12)	21(30.88)	1.23 (0.626-2.417)		30(44.12)	38(55.88)	0.536 (0.27-1.064)		41(60.29)	27(39.71)	1.279 (0.672-2.431)	
AA	115(62.84)	91(79.13)	24(20.87)	1.000	0.849	77(66.96)	38(33.04)	1.000	0.548	73(63.48)	42(36.52)	1.000	0.075	65(56.52)	50(43.48)	1.000	0.453
MTHFR rs1801131 A>C																	
AC+CC	49(26.78)	39(79.59)	10(20.41)	1.037 (0.45-2.388)		33(67.35)	16(32.65)	0.982 (0.481-2.005)		27(55.10)	22(44.90)	0.834 (0.398-1.745)		27(55.10)	22(44.90)	0.823 (0.418-1.623)	
AA	134(73.22)	104(77.61)	30(22.39)	1.000	0.932	91(67.91)	43(32.09)	1.000	0.960	76(56.72)	58(43.28)	1.000	0.629	79(58.96)	55(41.04)	1.000	0.575
MTHFR rs1801133 C>T																	
CT+TT	145(79.23)	112(77.24)	33(22.76)	0.828 (0.323-2.215)		97(66.90)	48(33.10)	0.864 (0.386-1.935)		81(55.86)	64(44.14)	1.194 (0.526-2.711)		80(55.17)	65(44.83)	0.569 (0.26-1.248)	
CC	38(20.77)	31(81.58)	7(18.42)	1.000	0.695	27(71.05)	11(28.95)	1.000	0.722	22(57.89)	16(42.11)	1.000	0.671	26(68.42)	12(31.58)	1.000	0.160

SNPs	n(%)	Increased ALT		OR(95%CI)	P	Increased AST		OR(95%CI)	P	Increased bilirubin		OR(95%CI)	P	Increased creatinine		OR(95%CI)	P
		Yes	No			Yes	No			Yes	No			Yes	No		
SLCO1B1 rs4149056 T>C																	
TC+CC	44(24.04)	10(22.73)	34(77.27)	1.216 (0.498-2.972)		6(13.64)	38(86.36)	0.862 (0.309-2.4)		10(22.73)	34(77.27)	1.443 (0.593-3.512)		9(20.45)	35(79.55)	0.641 (0.255-1.607)	
TT	139(75.96)	26(18.71)	113(81.29)	1.000	0.667	20(14.39)	119(85.61)	1.000	0.775	25(17.99)	114(82.01)	1.000	0.419	38(27.34)	101(72.66)	1.000	0.343
SLCO1B1 rs2306283 A>G																	
AG+GG	172(93.99)	36(20.93)	136(79.07)	NA ^a		25(14.53)	147(85.47)	1.881 (0.212-16.703)		32(18.60)	140(81.40)	0.866 (0.198-3.792)		47(27.33)	125(72.67)	NA ^a	
AA	11(6.01)	0	11(100)	1.000	0.999	1(9.09)	10(90.91)	1.000	0.571	3(27.27)	8(72.73)	1.000	0.849	0	11(100)	1.000	0.999
SLCO1B1 rs4149081 G>A																	
GA+AA	121(66.12)	24(19.83)	97(80.17)	1.1 (0.481-2.517)		20(16.53)	101(83.47)	1.974 (0.721-5.404)		20(16.53)	101(83.47)	0.633 (0.286-1.401)		36(29.75)	85(70.25)	2.002 (0.867-4.62)	
GG	62(33.88)	12(19.35)	50(80.65)	1.000	0.822	6(9.68)	56(90.32)	1.000	0.186	15(24.19)	47(75.81)	1.000	0.259	11(17.74)	51(82.26)	1.000	0.104
SLCO1B1 rs11045879 T>C																	
TC+CC	125(68.31)	25(20.00)	100(80.00)	1.131 (0.484-2.646)		20(16.00)	105(84.00)	1.751 (0.636-4.825)		21(16.80)	104(83.20)	0.638 (0.285-1.429)		36(28.80)	89(71.20)	1.763 (0.76-4.093)	

TT	58(31.69)	11(18.97)	47(81.03)	1.000	0.776	6(10.34)	52(89.66)	1.000	0.278	14(24.14)	44(75.86)	1.000	0.275	11(18.97)	47(81.03)	1.000	0.187
SLCO19A1 rs2838958 G>A																	
GA+AA	146(79.78)	29(19.86)	117(80.14)	1.594 (0.571-4.45)		19(13.01)	127(86.99)	0.749 (0.264-2.124)		30(20.55)	116(79.45)	1.322 (0.439-3.988)		40(27.40)	106(72.60)	2.48 (0.894-6.879)	
GG	37(20.22)	7(18.92)	30(81.08)	1.000	0.374	7(18.92)	30(81.08)	1.000	0.587	5(13.51)	32(86.49)	1.000	0.620	7(18.92)	30(81.08)	1.000	0.081
SLCO19A1 rs3788200 A>G																	
AG+GG	149(81.42)	29(19.46)	120(80.54)	1.036 (0.385-2.79)		20(13.42)	129(86.58)	0.732 (0.152-16.555)		31(20.81)	118(79.19)	1.759 (0.548-5.641)		37(24.83)	112(75.17)	0.974 (0.391-2.429)	
AA	34(18.58)	7(20.59)	27(79.41)	1.000	0.944	6(17.65)	28(82.35)	1.000	0.558	4(11.76)	30(88.24)	1.000	0.342	10(29.41)	24(70.59)	1.000	0.956
ABCC2 rs3740065 A>G																	
AG+GG	117(63.93)	21(17.95)	96(82.05)	0.933 (0.414-2.101)		14(11.97)	103(88.03)	0.64 (0.261-1.568)		22(18.80)	95(81.20)	1.1 (0.477-2.54)		29(24.79)	88(75.21)	0.742 (0.336-1.636)	
AA	66(36.07)	15(22.73)	51(77.27)	1.000	0.866	12(18.18)	54(81.82)	1.000	0.329	13(19.70)	53(80.30)	1.000	0.823	18(27.27)	48(72.73)	1.000	0.459
ABCC2 rs717620 C>T																	
CT+TT	64(34.97)	12(18.75)	52(81.25)	0.74 (0.319-1.715)		8(12.50)	56(87.50)	0.646 (0.25-1.666)		14(21.88)	50(78.12)	1.53 (0.677-3.46)		14(21.88)	50(78.13)	0.899 (0.404-1.999)	
CC	119(65.03)	24(20.17)	95(79.83)	1.000	0.482	18(15.13)	101(84.87)	1.000	0.366	21(17.65)	98(82.35)	1.000	0.307	33(27.73)	86(72.27)	1.000	0.794
ABCC2 rs2273697 G>A																	
GA+AA	30(16.39)	8(26.67)	22(73.33)	1.821 (0.671-4.942)		8(26.67)	22(73.33)	3.494 (1.236-9.873)		8(26.67)	22(73.33)	1.641 (0.606-4.442)		8(26.67)	22(73.33)	0.883 (0.329-2.371)	
GG	153(83.61)	28(18.30)	125(81.70)	1.000	0.239	18(11.76)	135(88.24)	1.000	0.018	27(17.65)	126(82.35)	1.000	0.330	39(25.49)	114(74.51)	1.000	0.805
ABCC4 rs9302061 C>T																	
CT+TT	109(59.56)	19(17.43)	90(82.57)	0.727 (0.328-1.614)		13(11.93)	96(88.07)	0.648 (0.269-1.561)		18(16.51)	91(83.49)	0.699 (0.316-1.547)		26(23.85)	83(76.15)	0.674 (0.318-1.429)	
CC	74(40.44)	17(22.97)	57(77.03)	1.000	0.434	13(17.57)	61(82.43)		0.334	17(22.97)	57(77.03)	1.000	0.377	21(28.38)	53(71.62)	1.000	0.303
ABCC4 rs7317112 A>G																	
AG+GG	77(42.08)	16(20.78)	61(79.22)	1.473 (0.654-3.32)		12(15.58)	65(84.42)	1.477 (0.608-3.587)		14(18.18)	63(81.82)	0.887 (0.4-1.966)		17(22.08)	60(77.92)	0.82 (0.382-1.761)	
AA	106(57.92)	20(18.87)	86(81.13)	1.000	0.350	14(13.21)	92(86.79)	1.000	0.389	21(19.81)	85(80.19)	1.000	0.767	30(28.30)	76(71.70)	1.000	0.611
MTRR rs1801394 A>G																	
AG+GG	68(37.16)	9(13.24)	59(86.76)	0.484 (0.2-1.172)		7(10.29)	61(89.71)	0.551 (0.208-1.461)		7(10.29)	61(89.71)	0.231 (0.084-0.632)		20(29.41)	48(70.59)	1.235 (0.581-2.625)	
AA	115(62.84)	27(23.48)	88(76.52)	1.000	0.108	19(16.52)	96(83.48)	1.000	0.231	28(24.35)	87(75.65)	1.000	0.004	27(23.48)	88(76.52)	1.000	0.583
MTHFR rs1801131 A>C																	
AC+CC	49(26.78)	7(14.29)	42(85.71)	0.633 (0.24-1.666)		5(10.20)	44(89.80)	0.564 (0.19-1.671)		13(26.53)	36(73.47)	1.895 (0.825-4.354)		17(34.69)	32(65.31)	2.006 (0.908-4.432)	
AA	134(73.22)	29(21.64)	105(78.36)	1.000	0.354	21(15.67)	113(84.33)	1.000	0.301	22(16.42)	112(83.58)	1.000	0.132	30(22.39)	104(77.61)	1.000	0.085
MTHFR rs1801133 C>T																	
CT+TT	145(79.23)	29(20.00)	116(80.00)	1.142 (0.431-3.026)		21(14.48)	124(85.52)	1.291 (0.431-3.868)		29(20.00)	116(80)	1.196 (0.43-3.323)		38(26.21)	107(73.79)	1 (0.402-2.49)	

CC	38(20.77)	7(18.42)	31(81.58)	1.000	0.790	5(13.16)	33(86.84)	1.000	0.648	6(15.79)	32(84.21)	1.000	0.732	9(23.68)	29(76.32)	1.000	1.000
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Abbreviations: SNPs, Single nucleotide polymorphisms; MTX, methotrexate; OR, odds ratio; CI, confidence interval; ALT, alanine aminotransferase; AST, aspartate aminotransferase. *P* value was estimated by logistic regression analysis, and covariates included gender, age, ethnicity, immunophenotype, MTX dose, body surface area, and tyrosine kinase inhibitors (TKI). a, NA, not available.