

**Supplementary Table 4.** Association between SNPs and chemotherapy-related toxicity with  $p < 0.1$  in the univariable analysis

Endpoint	SNP	Model	Univariable HR (95% CI)	p-value
Severe toxicity	<i>ATIC</i>	Recessive	1.54 (1.01-2.35)	0.045
Severe toxicity, laboratory	<i>ATIC</i>	Recessive	1.89 (1.15-3.10)	0.011†
	<i>MTHFR</i>	Recessive	2.09 (1.03-4.23)	0.041
Severe toxicity, clinical	<i>ATIC</i>	Recessive	1.80 (1.10-2.96)	0.012†
<i>Clinical</i>				
Anorexia, all grade	<i>FPGS</i>	Dominant	0.68 (0.45-1.02)	0.059
	<i>ATIC</i>	Dominant	0.68 (0.44-1.05)	0.078
Anorexia, severe	<i>SLC19A1</i>	Dominant	0.15 (0.03-0.72)	0.008†
Diarrhea, all grade	<i>ATIC</i>	Recessive	2.01 (1.07-3.78)	0.012†
	<i>MTHFR</i>	Dominant	0.52 (0.28-0.98)	0.042
Fatigue, all grade	<i>FPGS</i>	Dominant	0.72 (0.50-1.02)	0.061
Fatigue, severe	<i>ATIC</i>	Recessive	3.33 (1.47-7.56)	0.004†
	<i>DHFR</i>	Recessive	3.80 (1.41-10.27)	0.018
	<i>SLC19A1</i>	Recessive	2.36 (0.93-5.99)	0.071
	<i>ABCC2</i>	Dominant	2.28 (1.00-5.20)	0.050
Nausea and vomiting, all grade	<i>MTHFR</i>	Recessive	1.87 (1.00-3.51)	0.050
	<i>SLC19A1</i>	Recessive	1.59 (0.94-2.68)	0.082
Mucositis, all grade	<i>ATIC</i>	Recessive	0.61 (0.35-1.08)	0.090
Infection normal ANC, all grade	<i>ABCC2</i>	Recessive	3.83 (1.18-12.51)	0.026
Taste alteration, all grade	<i>ATIC</i>	Recessive	0.56 (0.29-1.08)	0.085
	<i>GGH</i>	Dominant	0.66 (0.40-1.08)	0.097
Constipation, all grade	<i>SLC19A1</i>	Dominant	0.60 (0.37-0.98)	0.042
	<i>FPGS</i>	Recessive	1.79 (1.02-3.16)	0.043
Dry and watery eyes, all grade	<i>ABCC2</i>	Dominant	0.50 (0.25-0.98)	0.044
Dysphagia, all grade	<i>ABCC2</i>	Recessive	3.35 (1.03-10.93)	0.045
	<i>ATIC</i>	Recessive	0.40 (0.16-1.02)	0.055
Alopecia, all grade	<i>ATIC</i>	Recessive	2.57 (1.15-5.75)	0.021
	<i>TYMS</i>	High + intermediate vs low	0.29 (0.10-0.86)	0.025
	<i>MTHFR</i>	Recessive	2.72 (0.93-7.98)	0.068
Abdominal distension, all grade	<i>MTHFR</i>	Recessive	3.31 (1.11-9.90)	0.032
	<i>TYMS</i>	High + intermediate vs low	0.35 (0.12-1.05)	0.062
	<i>ABCC2</i>	Dominant	2.13 (0.88-5.14)	0.093
<i>Laboratory</i>				
Anemia, severe	<i>ATIC</i>	Recessive	4.38 (1.67-11.52)	0.003†
	<i>DHFR</i>	Recessive	4.28 (1.39-13.15)	0.019
Leukopenia, severe	<i>DHFR</i>	Dominant	2.85 (1.28-6.36)	0.019
	<i>ATIC</i>	Recessive	2.01 (0.93-4.32)	0.076
Neutropenia, severe	<i>ATIC</i>	Recessive	2.24 (1.25-4.03)	0.007†
	<i>DHFR</i>	Dominant	1.63 (0.92-2.90)	0.094
	<i>GGH</i>	Dominant	1.70 (0.91-3.18)	0.097
Trombopenia, severe	<i>ATIC</i>	Recessive	2.63 (1.01-6.81)	0.047

† significant  $p < 0.1$  after false discovery rate correction. Abbreviations: HR, hazard ratio; CI, confidence interval