Supplementary material for Eckhoff L. et al. Docetaxel-induced neuropathy: A pharmacogenetic case-control study of 150 women with early-stage breast cancer. Acta Oncol 2015;54:535–42.

Supplementary Table I. Assays used for SNP genotyping and primers used for sequencing.

Gene	dbSNP ID	Genotyping ¹	Assay number	Forward primer (5'-3')	Reverse primer (5'-3')
GSTP1	rs1695	DME TaqMan assay	C_3237198_20		
	rs1138272	DME TaqMan assay	C_1049615_20		
ABCB1	rs2032582	DME TaqMan assays	C_11711720D_40 / C_11711720C_30		
	rs1128503	DME TaqMan assay	C_7586662_10		
	rs1045642	DME TaqMan assay	C_7586657_20		
NAT2	rs1799931	DME TaqMan assay	C_572770_20		
TUBB2A	rs909964	Sanger Sequencing		<u>Nested PCR</u>	<u>Nested PCR</u>
	rs909965	Sanger Sequencing		First PCR: CACTGCAAATGGGTCTTCAA ²	First PCR: CAAATACACCCAGGGGAATG ²
	rs9501929	Sanger Sequencing		Second PCR: CAGCGGCAGCAGCAATAG ²	Second PCR: GATCTGGTTGCCGCACTG ²
	rs3734492	Sanger Sequencing		Sequencing: Same primer as in the second PCR	Sequencing: Same primer as in the second PCR
	rs13219681	Sanger Sequencing			
ERCC1	rs3212986	Functionally tested TaqMan assay	C_2532948_10		
ATP7A	rs2227291	DME TaqMan assay	C_12118534_30		
CYP3A5	rs776746	DME TaqMan assay	C_26201809_30		
CYP3A4	rs2740574	Sanger Sequencing		<u>Nested PCR</u>	<u>Nested PCR</u>
				First PCR: CTGTGTGAGGAGTTTGGTGAG ³	First PCR: TGGAAGAGGCTTCTCCACCTTG ³
				Second PCR: GCTCTGTCTGTCTGGGTTTGG ³	Second PCR: CACACCACTCACTGACCTCCT ³
				Sequencing: Same primer as in the second PCR	Sequencing: TCAGAACTCAAGTGAGCC ³
CHST3	rs4148950	DME TaqMan assay	C_30633889_10		
	rs1871450	DME TaqMan assay	C_1904466_20		
SLCO1B3	rs11045585	Functionally tested TaqMan assay	C_31106434_10		
SLC10A2	rs2301159	DME TaqMan assay	C_15755991_30		

¹Pre-designed TaqMan assays are from Applied Biosystems (Foster City, California, USA); ²Primers used for *TUBB2A* sequencing are from Leandro-Garcia et al. [1]; ³Primers used for *CYP3A4* sequencing are from Lepper et al. [2]. dbSNP ID, single nucleotide polymorphism database identification; DME, drug metabolism enzyme.

References

[1] Leandro-Garcia LJ, Leskela S, Jara C, Green H, Avall-Lundqvist E, Wheeler HE, et al. Regulatory polymorphisms in beta-tubulin IIa are associated with paclitaxel-induced peripheral neuropathy. Clin Cancer Res 2012;18:4441–8.

[2] Lepper ER, Baker SD, Permenter M, Ries N, van Schaik RH, Schenk PW, et al. Effect of common CYP3A4 and CYP3A5 variants on the pharmacokinetics of the cytochrome P450 3A phenotyping probe midazolam in cancer patients. Clin Cancer Res 2005;11:7398–404.

Supplementary Table II. Time to neuropathy analysis of SNPs in *GSTP1* and *ABCB1*. Time was defined as cumulated dose of docetaxel and an event was described as the first incidence of DIPN ≥ 2 . N = 147.

Primary analysis	rs number	Geno-type	HR	95% Confidence Interval	p
Glutathione S-transferase pi 1 (<i>GSTP1</i>)	1695	A/A	Ref.		
		A/G	1.04	0.63–1.72	
		G/G	1.00	0.49–2.06	1.0
	1138272 [†]	C/C	Ref.		
		C/T	1.78	1.04–3.04	0.04
ATP-binding cassette, sub-family B (MDR/TAP), member 1 (<i>ABCB1</i>)	2032582	T/T	*		
		G/G	Ref.		
		G/T	0.62	0.35–1.12	
		T/T	0.54	0.29–1.03	0.2
		A/T	*		
	1128503	A/G	*		
		C/C	Ref.		
		C/T	1.26	0.72–2.21	0.06
	1045642	T/T	1.92	0.99–3.69	
		C/C	Ref.		
		C/T	1.06	0.56–2.01	0.1
		T/T	1.63	0.86–3.10	

Ref, reference.

*Not included in analysis because of limited numbers of patients; [†] Results not adjusted for other co-variants. When adjusting for regimen, numbers of positive lymph nodes, and BMI, HR = 1.90 (95% CI 1.11–3.26; p = 0.02).