

Additional file 4

Supplementary Table 7 Association between baseline MRP2 expression and breast cancer recurrence, by wildtype and heterozygote/variant CYP2D6 within ER/TAM group.

MRP2 expression at baseline, by CYP2D6 genotype	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
Wildtype								
None	64	66	1	1	43	52	1	1
Positive	193	195	0.98 (0.65, 1.48)	0.95 (0.56, 1.61)	105	96	0.73 (0.44, 1.22)	0.75 (0.41, 1.34)
Heterozygote or variant								
None	42	42	1	1	35	38	1	1
Positive	123	105	0.95 (0.56, 1.60)	1.04 (0.60, 1.79)	64	57	0.82 (0.45, 1.51)	0.94 (0.46, 1.93)

ER+, Wildtype, adjusted cases/controls n=249/256

ER+, Heterozygote or variant, adjusted cases/controls n=126/121

ER-, Wildtype, adjusted cases/controls n=142/123

ER-, Heterozygote or variant, adjusted cases/controls n=93/81

Supplementary Table 8 Association between baseline MRP2 expression and breast cancer recurrence, by wildtype and heterozygote/variant UGT2B15*2 within ER/TAM group.

MRP2 expression at baseline, by UGT2B15*2 genotype	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
Wildtype (A)								
None	33	31	1	1	24	27	1	1
Positive	96	83	1.13 (0.61, 2.09)	1.24 (0.65, 2.36)	52	51	0.92 (0.46, 1.86)	0.77 (0.35, 1.74)
Heterozygote (AB) or Variant (B)								
None	72	77	1	1	55	63	1	1
Positive	222	222	0.92 (0.63, 1.35)	0.93 (0.63, 1.37)	119	100	0.71 (0.45, 1.14)	0.72 (0.42, 1.23)

ER+, Wildtype, adjusted cases/controls n=127/113

ER+, Heterozygote or variant adjusted cases/controls n=286/292

ER-, Wildtype, adjusted cases/controls n=75/64

ER-, Heterozygote or variant adjusted cases/controls n=163/138

Supplementary Table 9 Association between baseline MRP2 expression and breast cancer recurrence, by wildtype and heterozygote/variant UGT2B7*2 within ER/TAM group.

MRP2 expression at baseline, by UGT2B7*2 genotype	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
Wildtype (A)								
None	36	22	1	1	15	25	1	1
Positive	71	72	1.55 (0.80, 3.01)	1.50 (0.74, 3.05)	35	32	0.51 (0.21, 1.24)	0.61 (0.20, 1.92)
Heterozygote (AB) or Variant (B)								
None	70	85	1	1	62	63	1	1
Positive	243	229	0.80 (0.55, 1.15)	0.85 (0.58, 1.24)	132	118	0.84 (0.54, 1.31)	0.80 (0.48, 1.32)

ER+, Wildtype, adjusted cases/controls n=105/94

ER+, Heterozygote or variant adjusted cases/controls n=305/307

ER-, Wildtype, adjusted cases/controls n=49/44

ER-, Heterozygote or variant adjusted cases/controls n=183/156

Supplementary Table 10 Association between baseline MRP2 expression and breast cancer recurrence, by Apolipoprotein D (ApoD) expression within ER/TAM group.

MRP2 expression at baseline, by ApoD expression	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
ApoD expression = 0								
None	36	37	1	1	26	29	1	1
Positive	73	83	1.12 (0.63, 2.01)	1.20 (0.65, 2.19)	45	38	0.85 (0.40, 1.78)	0.77 (0.32, 1.86)
ApoD expression > 0								
None	30	35	1	1	14	49	1	1
Positive	109	105	0.76 (0.42, 1.38)	0.70 (0.38, 1.30)	49	39	0.84 (0.33, 2.14)	0.56 (0.16, 2.00)

ER+, ApoD expression=0, adjusted cases/controls n=107/118

ER+, ApoD expression>0, adjusted cases/controls n=137/139

ER-, ApoD expression=0, adjusted cases/controls n=68/57

ER-, ApoD expression>0, adjusted cases/controls n=60/44

Supplementary Table 11 Association between baseline MRP2 expression and breast cancer recurrence, by 14-3-3 ζ expression within ER/TAM group.

MRP2 expression at baseline, by 14-3-3 ζ expression	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
14-3-3 ζ expression, 50th percentile or lower								
None	73	75	1	1	32	41	1	1
Positive	173	172	0.96 (0.65, 1.42)	1.03 (0.69, 1.54)	66	54	0.65 (0.35, 1.21)	0.54 (0.26, 1.13)
14-3-3 ζ expression, Above 50th percentile								
None	33	32	1	1	45	47	1	1
Positive	150	139	0.96 (0.55, 1.68)	1.01 (0.57, 1.80)	109	103	0.82 (0.38, 1.76)	1.02 (0.57, 1.82)

ER+, 14-3-3 ζ expression, 50th percentile or lower, adjusted cases/controls n=239/240

ER+, 14-3-3 ζ expression, 50th percentile or lower, adjusted cases/controls n=180/169

ER-, 14-3-3 ζ expression, above 50th percentile, adjusted cases/controls n=94/79

ER-, 14-3-3 ζ expression, above 50th percentile, adjusted cases/controls n=147/128

Supplementary Table 12 Association between baseline MRP2 expression and breast cancer recurrence, by stanniocalcin 1 (STC1) expression within ER/TAM group.

MRP2 expression at baseline, by STC1 expression	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
STC1 expression = 0								
None	70	69	1	1	54	41	1	1
Positive	141	140	1.01 (0.67, 1.53)	1.07 (0.66, 1.54)	67	99	0.74 (0.46, 1.17)	0.71 (0.42, 1.20)
STC1 expression > 0								
None	30	32	1	1	20	20	1	1
Positive	177	168	0.83 (0.48, 1.46)	0.86 (0.49, 1.53)	65	59	0.73 (0.33, 1.62)	0.78 (0.31, 1.92)

ER+, STC1 expression=0, adjusted cases/controls n=211/209

ER+, STC1 expression>0, adjusted cases/controls n=207/200

ER-, STC1 expression=0, adjusted cases/controls n=161/136

ER-, STC1 expression>0, adjusted cases/controls n=83/75

Supplementary Table 13 Association between baseline MRP2 expression and breast cancer recurrence, by stanniocalcin 2 (STC2) expression within ER/TAM group.

MRP2 expression at baseline, by STC2 expression	ER+/TAM+				ER-/TAM-			
	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)	Cases (n)	Controls (n)	Matched OR ^a (95% CI)	Adjusted OR ^b (95% CI)
STC2 expression = 0								
None	40	34	1	1	44	47	1	1
Positive	109	81	0.90 (0.51, 1.58)	0.94 (0.53, 1.66)	93	78	0.84 (0.49, 1.43)	0.73 (0.40, 1.35)
STC2 expression >0								
None	59	67	1	1	26	34	1	1
Positive	184	203	0.99 (0.65, 1.50)	0.98 (0.64, 1.49)	74	66	0.63 (0.33, 1.19)	0.77 (0.38, 1.59)

ER+, STC2 expression=0, adjusted cases/controls n=149/115
ER+, STC2 expression=0, adjusted cases/controls n=243/270
ER-, STC2 expression>0, adjusted cases/controls n=135/103
ER-, STC2 expression>0, adjusted cases/controls n=98/91