

Supplementary Table 4. ORs and 95% CIs of all SNPs among European American (EA) and African American (AA) women by lifetime estrogen exposure in WCHS.

Gene	SNP	Chr.	Geno	European American						African American					
				Long Lifetime Estrogen Exposure ^b			Short Lifetime Estrogen Exposure			Long Lifetime Estrogen Exposure			Short Lifetime Estrogen Exposure		
				Ca/Co	OR(95%CI) ^a	P-trend	Ca/Co	OR(95%CI)	P-trend	Ca/Co	OR(95%CI)	P-trend	Ca/Co	OR(95%CI)	P-trend
COMT	rs4633	22	GG	84/79	1.00	0.85	64/86	1.00	0.92	35/40	1.00	0.75	22/36	1.00	0.36
			GA	174/155	1.09 (0.73-1.62)		149/149	1.28 (0.84-1.97)		155/161	1.14 (0.66-1.95)		119/152	1.33 (0.73-2.44)	
			AA	87/78	1.04 (0.66-1.66)		77/89	1.04 (0.64-1.69)		168/165	1.13 (0.66-1.94)		105/179	0.98 (0.54-1.80)	
CYP17A1	rs10883782	10	AA	227/211	1.00	0.61	202/203	1.00	0.06	274/297	1.00	0.49	194/291	1.00	0.64
			AG	105/84	1.21 (0.84-1.74)		80/108	0.73 (0.50-1.07)		79/64	1.35 (0.91-2.01)		47/71	1.09 (0.71-1.67)	
			GG	16/13	0.85 (0.37-1.92)		6/13	0.52 (0.19-1.46)		4/7	0.46 (0.13-1.70)		3/3	1.29 (0.25-6.59)	
CYP17A1	rs12413409	10	GG	277/255	1.00	0.53	236/264	1.00	0.71	324/330	1.00	N/A	220/329	1.00	N/A
			GA	65/52	1.18 (0.76-1.82)		49/57	0.95 (0.61-1.50)		34/35	1.03 (0.61-1.73)		26/39	1.01 (0.58-1.76)	
			AA	4/4	1.00 (0.22-4.44)		4/2	3.59 (0.55-23.35)		0/1	N/A		0/0	N/A	
CYP17A1	rs2486758	10	AA	212/199	1.00	0.25	178/206	1.00	0.74	311/322	1.00	0.51	218/318	1.00	N/A
			AG	118/104	1.14 (0.80-1.61)		102/103	1.15 (0.79-1.66)		48/43	1.29 (0.80-2.07)		28/45	0.91 (0.53-1.56)	
			GG	18/9	1.60 (0.66-3.84)		9/15	0.48 (0.19-1.24)		1/3	0.39 (0.04-4.15)		0/5	N/A	
CYP17A1	rs6162	10	GG	120/101	1.00	0.75	106/106	1.00	0.85	134/138	1.00	0.82	95/168	1.00	0.42
			GA	162/149	0.95 (0.66-1.37)		136/162	0.88 (0.6-1.3)		173/172	1.09 (0.78-1.53)		118/148	1.45 (1.01-2.09)	
			AA	65/61	0.93 (0.58-1.49)		48/55	0.99 (0.6-1.64)		53/57	1.01 (0.63-1.63)		33/52	1 (0.59-1.71)	
CYP17A1	rs619824	10	CC	113/101	1.00	1.00	97/104	1.00	0.95	52/51	1.00	0.71	29/48	1.00	0.74
			CA	163/145	1.05 (0.72-1.52)		140/159	0.98 (0.66-1.45)		159/164	0.86 (0.54-1.38)		116/174	1.17 (0.68-2.01)	
			AA	72/66	0.99 (0.62-1.57)		53/60	0.99 (0.60-1.63)		149/153	0.88 (0.55-1.42)		100/145	1.15 (0.66-1.99)	
CYP19A1	rs10046	15	AA	93/86	1.00	0.60	82/93	1.00	0.90	26/23	1.00	0.26	16/21	1.00	0.10
			AG	177/152	1.02 (0.69-1.51)		145/168	0.96 (0.65-1.43)		145/134	0.8 (0.42-1.53)		63/137	0.59 (0.28-1.25)	
			GG	77/74	0.88 (0.55-1.39)		63/63	1.05 (0.64-1.72)		189/211	0.72 (0.38-1.34)		165/209	1.20 (0.59-2.45)	
CYP19A1	rs11575899	15	II	140/132	1.00	0.91	124/142	1.00	0.68	178/174	1.00	0.79	109/158	1.00	0.87
			ID	169/141	1.12 (0.79-1.58)		138/143	1.10 (0.77-1.58)		142/152	0.94 (0.68-1.31)		99/164	0.85 (0.59-1.23)	
			DD	38/39	0.86 (0.50-1.48)		28/39	0.77 (0.42-1.38)		38/41	0.97 (0.58-1.62)		37/45	1.18 (0.7-1.99)	
CYP19A1	rs2445765	15	CC	243/207	1.00	0.07	198/221	1.00	0.89	213/211	1.00	0.39	143/196	1.00	0.11
			CG	100/95	0.78 (0.54-1.13)		85/90	1.03 (0.70-1.50)		133/133	0.96 (0.7-1.33)		88/142	0.77 (0.53-1.1)	
			GG	5/10	0.42 (0.13-1.32)		7/13	0.81 (0.30-2.17)		14/23	0.65 (0.31-1.35)		15/30	0.67 (0.34-1.35)	
CYP19A1	rs4775936	15	GG	91/89	1.00	0.23	75/86	1.00	0.84	255/263	1.00	0.56	192/275	1.00	0.25
			GA	179/152	1.32 (0.89-1.95)		157/169	1.13 (0.75-1.72)		93/93	1.07 (0.74-1.53)		46/84	0.68 (0.44-1.05)	
			AA	77/70	1.32 (0.82-2.11)		57/69	1.05 (0.63-1.74)		11/12	1.28 (0.53-3.07)		8/9	1.18 (0.42-3.27)	
CYP19A1	rs700518	15	GG	81/75	1.00	0.46	68/84	1.00	0.72	15/17	1.00	0.60	12/14	1.00	0.30
			GA	181/158	1.00 (0.67-1.50)		152/167	1.06 (0.70-1.60)		127/120	1 (0.46-2.16)		63/112	0.68 (0.29-1.62)	
			AA	85/79	0.84 (0.52-1.34)		70/73	1.09 (0.67-1.79)		218/231	0.91 (0.43-1.93)		170/241	0.94 (0.41-2.16)	
CYP19A1	rs700519	15	GG	329/290	1.00	N/A	268/302	1.00	N/A	261/254	1.00	0.15	167/257	1.00	0.41
			GA	19/20	0.71 (0.35-1.42)		21/22	1.21 (0.62-2.35)		92/101	0.87 (0.61-1.24)		73/100	1.22 (0.83-1.79)	
			AA	0/1	N/A		1/0	N/A		7/13	0.45 (0.17-1.22)		6/11	1.01 (0.35-2.93)	
CYP19A1	rs727479	15	AA	140/133	1.00	0.99	122/139	1.00	0.71	230/237	1.00	0.94	158/223	1.00	0.80
			AC	169/138	1.17 (0.82-1.65)		140/145	1.09 (0.76-1.57)		114/114	1.03 (0.73-1.44)		73/131	0.79 (0.55-1.14)	
			CC	39/40	0.87 (0.51-1.49)		28/40	0.79 (0.44-1.41)		16/17	0.98 (0.46-2.1)		15/14	1.51 (0.69-3.32)	
CYP19A1	rs749292	15	GG	94/90	1.00	0.47	82/92	1.00	0.89	110/101	1.00	0.95	69/99	1.00	0.30
			GA	179/154	1.2 (0.82-1.76)		156/170	1.09 (0.72-1.63)		168/182	0.85 (0.59-1.22)		118/180	0.85 (0.57-1.27)	
			AA	75/68	1.17 (0.74-1.87)		51/62	1.02 (0.61-1.71)		82/85	1 (0.65-1.54)		57/89	0.78 (0.48-1.25)	

CYP1A1	rs1378942	15	AA	140/109	1.00	0.53	89/131	1.00	0.07	6/5	1.00	0.07	3/6	1.00	0.77
			AC	157/162	0.74 (0.52-1.06)		152/155	1.36 (0.94-1.98)		67/53	0.69 (0.18-2.65)		43/62	1.26 (0.28-5.79)	
			CC	51/41	0.99 (0.59-1.66)		49/36	1.53 (0.88-2.65)		286/310	0.44 (0.12-1.65)		200/300	1.31 (0.29-5.92)	
CYP1A1	rs1799814	15	CC	294/276	1.00	0.31	261/278	1.00	0.06	356/363	1.00	N/A	241/364	1.00	N/A
			CA	43/31	1.32 (0.78-2.23)		25/41	0.70 (0.40-1.22)		2/4	0.51 (0.09-3.01)		4/4	1.23 (0.28-5.33)	
			AA	8/5	1.26 (0.38-4.11)		1/4	0.10 (0.05-7.05)		0/0	N/A		0/0	N/A	
CYP1A2	rs2470893	15	GG	204/188	1.00	0.73	156/162	1.00	0.82	318/334	1.00	0.06	217/334	1.00	0.38
			GA	131/104	1.16 (0.82-1.63)		114/140	0.93 (0.65-1.33)		36/31	1.51 (0.87-2.62)		28/33	1.29 (0.73-2.26)	
			AA	13/20	0.55 (0.26-1.19)		20/22	1.00 (0.51-1.98)		4/2	3.72 (0.58-24.00)		1/1	1.34 (0.08-23.28)	
CYP1A2	rs2472297	15	GG	250/233	1.00	1.00	193/211	1.00	0.72	328/340	1.00	0.12	225/340	1.00	N/A
			GA	91/71	1.18 (0.81-1.72)		82/102	0.90 (0.61-1.32)		29/27	1.39 (0.78-2.50)		21/27	1.09 (0.58-2.05)	
			AA	6/8	0.48 (0.16-1.44)		13/10	1.74 (0.72-4.19)		3/1	4.70 (0.44-50.58)		0/1	N/A	
CYP1A2	rs2472304	15	AA	131/100	1.00	0.28	87/128	1.00	0.06	7/5	1.00	0.07	3/6	1.00	0.58
			AG	163/161	0.73 (0.5-1.05)		149/157	1.33 (0.91-1.94)		69/61	0.59 (0.16-2.20)		46/69	1.22 (0.27-5.58)	
			GG	52/47	0.84 (0.51-1.4)		53/38	1.59 (0.93-2.73)		283/302	0.42 (0.12-1.54)		197/290	1.35 (0.3-6.11)	
CYP1A2	rs762551	15	AA	168/134	1.00	0.21	133/167	1.00	0.14	129/119	1.00	0.31	84/131	1.00	0.82
			AC	153/155	0.71 (0.51-1.01)		132/135	1.29 (0.91-1.85)		169/175	0.86 (0.61-1.21)		115/173	0.96 (0.66-1.39)	
			CC	26/23	0.94 (0.5-1.77)		25/21	1.4 (0.71-2.74)		62/73	0.81 (0.52-1.26)		47/64	1.08 (0.67-1.76)	
CYP1B1	rs1056836	2	GG	107/101	1.00	0.53	85/90	1.00	0.79	28/19	1.00	0.62	9/20	1.00	0.75
			GC	179/152	1.30 (0.90-1.90)		145/177	0.88 (0.59-1.31)		118/155	0.55 (0.29-1.07)		99/129	1.55 (0.65-3.71)	
			CC	61/58	1.1 (0.68-1.78)		59/57	1.11 (0.67-1.85)		214/194	0.74 (0.39-1.41)		138/219	1.31 (0.55-3.09)	
CYP1B1	rs1800440	2	AA	229/222	1.00	0.23	198/217	1.00	0.59	334/342	1.00	N/A	228/349	1.00	N/A
			AG	104/74	1.38 (0.95-2.00)		83/99	0.86 (0.59-1.25)		26/23	1.17 (0.63-2.18)		18/14	1.76 (0.82-3.78)	
			GG	15/12	1.01 (0.44-2.29)		9/8	1.09 (0.39-3.05)		0/1	N/A		0/3	N/A	
CYP2C9	rs1057910	10	AA	299/257	1.00	0.49	243/275	1.00	0.64	341/352	1.00	N/A	237/356	1.00	N/A
			AC	44/47	0.78 (0.49-1.25)		41/46	1.05 (0.64-1.71)		13/12	1.37 (0.57-3.26)		7/7	1.32 (0.44-3.99)	
			CC	3/2	1.63 (0.25-10.62)		2/2	2.13 (0.28-15.98)		1/0	N/A		0/0	N/A	
CYP3A4	rs4987161	7	AA	340/308	1.00	0.51	284/319	1.00	N/A	353/368	1.00	N/A	242/366	1.00	N/A
			AG	7/2	3.4 (0.65-17.78)		6/5	1.38 (0.4-4.76)		7/0	N/A		3/0	N/A	
			GG	0/1	N/A		0/0	N/A		0/0	N/A		0/0	N/A	
CYP3A5	rs776746	7	GG	297/260	1.00	0.21	242/281	1.00	0.80	37/44	1.00	0.32	17/35	1.00	0.20
			GA	49/49	0.78 (0.49-1.24)		45/42	1.02 (0.62-1.7)		158/142	1.14 (0.67-1.93)		103/156	1.32 (0.68-2.57)	
			AA	2/2	0.29 (0.03-3.38)		3/1	1.78 (0.15-21.39)		164/182	0.89 (0.52-1.52)		126/177	1.53 (0.78-2.98)	
CYP3A7	rs2257401	7	GG	281/250	1.00	0.33	236/276	1.00	0.62	71/80	1.00	0.49	44/80	1.00	0.10
			GC	63/56	0.94 (0.61-1.45)		50/47	1.08 (0.67-1.73)		194/182	1.18 (0.78-1.77)		121/193	1.11 (0.71-1.75)	
			CC	3/5	0.26 (0.05-1.36)		2/1	2.15 (0.18-25.68)		88/101	0.88 (0.55-1.40)		77/93	1.5 (0.9-2.49)	
ESR1	rs1801132	6	GG	197/216	1.00	0.0005	176/217	1.00	0.05	292/287	1.00	0.78	177/288	1.00	0.35
			GC	125/91	1.48 (1.06-2.07)		92/94	1.22 (0.81-1.82)		63/80	0.94 (0.63-1.43)		66/73	1.27 (0.86-1.87)	
			CC	24/5	3.83 (1.57-9.36)		21/13	2.31 (1.03-5.20)		4/1	4.67 (0.49-44.84)		3/5	0.77 (0.17-3.48)	
ESR1	rs2046210	6	GG	128/135	1.00	0.03	109/121	1.00	0.21	51/62	1.00	0.75	33/47	1.00	0.19
			GA	166/148	1.09 (0.79-1.52)		127/162	0.93 (0.62-1.39)		167/164	1.21 (0.76-1.94)		116/152	0.99 (0.60-1.64)	
			AA	54/29	1.88 (1.14-3.09)		53/41	1.63 (0.92-2.89)		142/141	1.14 (0.70-1.84)		96/168	0.77 (0.46-1.30)	
ESR1	rs2228480	6	GG	230/222	1.00	0.23	207/222	1.00	0.03	258/261	1.00	0.92	157/254	1.00	0.37
			GA	103/76	1.24 (0.85-1.79)		76/89	0.81 (0.55-1.19)		82/93	0.89 (0.62-1.28)		82/100	1.32 (0.91-1.9)	
			AA	10/8	1.34 (0.50-3.62)		2/10	0.07 (0.01-0.67)		13/9	1.57 (0.64-3.86)		3/8	0.56 (0.14-2.26)	
ESR1	rs2234693	6	AA	109/89	1.00	0.57	83/96	1.00	0.38	85/90	1.00	0.82	54/78	1.00	0.17
			AG	173/160	0.93 (0.64-1.36)		145/171	0.97 (0.65-1.44)		178/179	1.02 (0.7-1.5)		137/176	1.19 (0.77-1.83)	
			GG	66/63	0.87 (0.54-1.41)		62/56	1.3 (0.78-2.15)		96/99	0.95 (0.62-1.47)		55/113	0.73 (0.45-1.2)	

ESR1	rs3020314	6	AA	141/169	1.00	0.0007	120/162	1.00	0.02	30/30	1.00	0.75	24/28	1.00	0.38
			AG	163/123	1.54 (1.11-2.12)		128/131	1.51 (1.01-2.24)		148/150	1.19 (0.64-2.22)		95/147	0.58 (0.32-1.08)	
			GG	44/20	2.25 (1.27-3.98)		42/31	1.72 (0.94-3.15)		182/188	1.18 (0.63-2.19)		127/193	0.62 (0.34-1.14)	
ESR1	rs3798577	6	AA	96/103	1.00	0.36	89/93	1.00	0.18	129/119	1.00	0.32	78/128	1.00	0.39
			AG	181/147	1.31 (0.90-1.90)		151/162	0.91 (0.61-1.35)		162/173	0.82 (0.58-1.17)		110/170	1.02 (0.7-1.51)	
			GG	69/62	1.20 (0.75-1.91)		49/68	0.7 (0.42-1.16)		68/75	0.82 (0.53-1.28)		58/69	1.24 (0.78-1.99)	
ESR1	rs9383938	6	CC	286/252	1.00	0.56	226/267	1.00	0.13	268/251	1.00	0.32	164/264	1.00	0.28
			CA	59/57	0.96 (0.62-1.47)		60/54	1.38 (0.89-2.15)		84/107	0.81 (0.57-1.16)		77/98	1.21 (0.84-1.76)	
			AA	1/3	0.29 (0.03-2.94)		4/3	1.61 (0.33-7.89)		8/10	0.93 (0.34-2.54)		5/5	1.36 (0.36-5.13)	
ESR1	rs9397435	6	AA	292/265	1.00	0.58	231/276	1.00	0.07	298/304	1.00	0.63	202/300	1.00	N/A
			AG	54/45	1.14 (0.72-1.80)		55/45	1.53 (0.97-2.43)		60/59	1.03 (0.68-1.55)		44/66	1.05 (0.67-1.62)	
			GG	2/2	1.09 (0.15-7.93)		4/3	1.62 (0.33-7.93)		2/5	0.31 (0.05-1.77)		0/2	N/A	
ESR2	rs1255998	14	CC	252/248	1.00	0.07	226/255	1.00	0.70	82/81	1.00	0.49	41/73	1.00	0.18
			CG	92/58	1.67 (1.12-2.49)		56/67	0.86 (0.56-1.33)		174/185	0.83 (0.56-1.24)		127/192	1.37 (0.86-2.17)	
			GG	3/5	0.53 (0.10-2.80)		8/2	1.78 (0.27-11.88)		99/101	0.85 (0.54-1.32)		78/103	1.45 (0.87-2.42)	
ESR2	rs1256049	14	GG	327/302	1.00	0.26	274/296	1.00	N/A	289/300	1.00	0.91	206/295	1.00	0.21
			GA	21/7	2.11 (0.83-5.34)		15/28	0.42 (0.2-0.88)		68/62	1.10 (0.73-1.64)		38/67	0.77 (0.49-1.21)	
			AA	0/1	N/A		0/0	N/A		2/5	0.56 (0.1-3.04)		2/6	0.60 (0.11-3.17)	
ESR2	rs1256065	14	AA	122/109	1.00	0.73	100/118	1.00	0.85	278/282	1.00	0.85	197/291	1.00	0.86
			AC	162/140	1.05 (0.73-1.51)		139/151	1.05 (0.72-1.54)		77/76	1.15 (0.78-1.7)		48/74	0.99 (0.64-1.52)	
			CC	64/63	0.9 (0.57-1.42)		51/55	1.04 (0.63-1.72)		5/10	0.66 (0.21-2.07)		1/2	0.63 (0.05-7.44)	
ESR2	rs2987983	14	AA	143/131	1.00	0.44	128/144	1.00	0.31	61/67	1.00	0.58	37/63	1.00	0.39
			AG	153/143	0.98 (0.69-1.4)		120/142	1.05 (0.72-1.51)		164/172	1.03 (0.67-1.59)		116/179	1.08 (0.66-1.76)	
			GG	51/38	1.31 (0.78-2.20)		41/37	1.39 (0.81-2.40)		134/129	1.12 (0.71-1.76)		93/126	1.23 (0.73-2.05)	
ESR2	rs3020450	14	GG	143/127	1.00	0.56	128/138	1.00	0.28	126/128	1.00	0.94	87/121	1.00	0.57
			GA	155/148	0.93 (0.65-1.32)		122/150	1.04 (0.72-1.51)		167/168	1.02 (0.73-1.45)		119/188	0.86 (0.59-1.25)	
			AA	49/37	1.29 (0.77-2.18)		40/36	1.43 (0.82-2.47)		67/70	1.01 (0.65-1.57)		40/59	0.90 (0.54-1.50)	
HSD17B2	rs4445895	16	GG	116/95	1.00	0.23	114/126	1.00	0.41	156/177	1.00	0.27	112/175	1.00	0.52
			GA	174/156	0.85 (0.59-1.23)		127/153	0.99 (0.68-1.43)		162/149	1.19 (0.86-1.66)		111/159	1.11 (0.78-1.59)	
			AA	58/61	0.76 (0.47-1.22)		48/45	1.30 (0.78-2.16)		42/42	1.24 (0.75-2.05)		23/33	1.16 (0.63-2.13)	
PR	rs1042838	11	CC	246/200	1.00	0.57	202/235	1.00	0.52	339/330	1.00	N/A	229/348	1.00	0.12
			CA	87/101	0.77 (0.53-1.10)		76/76	1.29 (0.87-1.92)		17/34	0.49 (0.26-0.95)		14/15	1.65 (0.73-3.74)	
			AA	11/5	2.04 (0.65-6.41)		8/12	0.72 (0.25-2.06)		1/0	N/A		1/0	1000452.09 (0-)	
SRD5A1	rs3736316	5	GG	125/109	1.00	0.75	102/113	1.00	0.98	159/173	1.00	0.24	113/169	1.00	0.53
			GA	166/148	0.95 (0.66-1.36)		139/151	1.00 (0.68-1.46)		163/160	1.19 (0.86-1.64)		102/164	0.96 (0.67-1.38)	
			AA	57/55	0.93 (0.58-1.51)		49/59	1.01 (0.61-1.66)		37/35	1.28 (0.74-2.2)		31/35	1.32 (0.76-2.31)	
SRD5A1	rs3822430	5	AA	127/109	1.00	0.62	105/114	1.00	0.91	160/174	1.00	0.25	113/169	1.00	0.51
			AG	164/147	0.91 (0.64-1.31)		135/149	0.97 (0.66-1.41)		162/159	1.18 (0.86-1.63)		100/164	0.95 (0.66-1.36)	
			GG	57/56	0.90 (0.56-1.45)		50/60	0.98 (0.60-1.61)		37/35	1.27 (0.74-2.19)		31/34	1.36 (0.77-2.38)	
SRD5A2	rs523349	2	CC	173/140	1.00	0.18	145/172	1.00	0.65	202/188	1.00	0.21	138/182	1.00	0.11
			CG	151/141	0.89 (0.63-1.25)		112/116	1.22 (0.84-1.77)		138/153	0.87 (0.63-1.2)		88/155	0.68 (0.47-0.97)	
			GG	24/30	0.65 (0.35-1.21)		33/35	0.97 (0.54-1.74)		20/27	0.7 (0.36-1.33)		20/31	0.84 (0.44-1.59)	
UGT1A1	rs10929302	2	GG	161/131	1.00	0.16	151/160	1.00	0.62	181/192	1.00	0.75	126/176	1.00	0.37
			GA	155/142	0.94 (0.67-1.33)		113/136	0.87 (0.61-1.24)		152/139	1.17 (0.85-1.63)		101/161	0.85 (0.6-1.22)	
			AA	32/39	0.62 (0.35-1.08)		26/28	0.97 (0.52-1.80)		27/34	0.91 (0.51-1.61)		17/31	0.83 (0.43-1.6)	
UGT1A1	rs4124874	2	AA	94/82	1.00	0.53	83/102	1.00	0.61	13/11	1.00	0.45	7/9	1.00	0.25
			AC	180/150	1.18 (0.79-1.75)		129/144	1.04 (0.7-1.56)		95/122	0.67 (0.27-1.67)		68/119	0.72 (0.24-2.17)	
			CC	74/80	0.85 (0.54-1.36)		78/78	1.13 (0.71-1.79)		251/235	0.83 (0.34-2.05)		171/239	0.97 (0.33-2.84)	

UGT1A6	rs2070959	2	AA	145/118	1.00	0.76	142/138	1.00	0.51	213/236	1.00	0.42	129/207	1.00	0.77
			AG	156/149	0.93 (0.65-1.32)		118/157	0.71 (0.49-1.01)		129/112	1.23 (0.88-1.72)		106/131	1.37 (0.96-1.96)	
			GG	47/42	0.95 (0.57-1.59)		30/29	1.14 (0.63-2.06)		17/20	0.97 (0.48-2)		9/29	0.58 (0.26-1.29)	
UGT1A9	rs6714486	2	TT	309/281	1.00	N/A	249/286	1.00	0.72	253/265	1.00	0.39	186/248	1.00	0.06
			TA	35/27	1.41 (0.8-2.47)		35/33	1.19 (0.68-2.06)		93/85	1 (0.69-1.44)		55/102	0.68 (0.46-1.00)	
			AA	0/0	N/A		1/2	0.54 (0.04-6.57)		12/14	0.54 (0.23-1.27)		4/12	0.49 (0.15-1.64)	
UGT2B15	rs1902023	4	AA	91/80	1.00	0.06	78/86	1.00	0.45	55/69	1.00	0.64	36/73	1.00	0.43
			AC	196/158	1.00 (0.68-1.49)		145/164	0.89 (0.59-1.33)		183/167	1.47 (0.95-2.27)		138/187	1.51 (0.94-2.44)	
			CC	60/73	0.60 (0.37-0.98)		64/74	0.83 (0.51-1.36)		121/132	1.23 (0.77-1.94)		72/108	1.33 (0.79-2.24)	

Abbreviations: Geno, genotype; Ca/Co, numbers of cases and controls; OR, odds ratio; 95%CI, 95% confidence interval; EA, European American; AA, African American; P for trend p value for linear trend.

^a Adjusted for age at diagnosis (continuous), education (less than high school, high school, college and graduate school), family history of breast cancer (yes, no), history of benign breast disease (yes, no), menopausal status (premenopausal, postmenopausal), number of full pregnancies (continuous), breast feeding (yes, no, nulliparous), Hormone Replacement Therapy (HRT, yes, no), body mass index (continuous) and proportion of

^b Stratified by the length of endogenous estrogen exposure using median in both EA and AA controls as the cutoff (longer or shorter than 384 months).