

Table S4. Single nucleotide polymorphisms (SNPs) of innate immune response related pathways and risk of breast cancer by estrogen receptor status among 650 European American and 864 African American women in the WCHS^a

Gene	SNP	Genotype	European American						African American					
			Estrogen Receptor positive			Estrogen Receptor negative			Estrogen Receptor positive			Estrogen Receptor negative		
			# Case/ Control	OR (95% CI) ^{b,c}	P ^{d,e}	#Case/ Control	OR (95% CI) ^{b,c}	P ^{d,e}	# Case/ Control	OR (95% CI) ^{b,c}	P ^{d,e}	# Case/ Control	OR (95% CI) ^{b,c}	P ^{d,e}
TNFA	rs1799964	TT	121/198	1.00 (ref)	0.46	28/198	1.00 (ref)	0.31	149/286	1.00 (ref)	0.12	75/286	1.00 (ref)	0.33
		TC	64/96	1.13 (0.75-1.70)		19/96	1.43 (0.73-2.78)		67/102	1.26 (0.86-1.84)		22/102	0.84 (0.49-1.45)	
		CC	11/13	1.27 (0.52-3.06)		2/13	1.41 (0.28-7.05)		15/16	1.56 (0.73-3.36)		3/16	0.58 (0.16-2.10)	
		TC/CC	75/109	1.15 (0.78-1.69)	0.48	21/109	1.43 (0.75-2.72)	0.28	82/118	1.31 (0.91-1.86)	0.14	25/118	0.80 (0.48-1.34)	0.40
TNFA	rs1800630	CC	140/224	1.00 (ref)	0.38	35/224	1.00 (ref)	0.80	167/320	1.00 (ref)	0.08	83/320	1.00 (ref)	0.43
		CA	50/81	1.04 (0.68-1.60)		13/81	1.05 (0.52-2.15)		57/76	1.47 (0.98-2.21)		15/76	0.80 (0.43-1.49)	
		AA	9/6	2.11 (0.68-6.55)		1/6	1.40 (0.14-13.55)		6/8	1.31 (0.44-3.94)		2/8	0.72 (0.15-3.56)	
		CA/AA	59/87	1.12 (0.74-1.68)	0.60	14/87	1.07 (0.53-2.15)	0.84	63/84	1.46 (0.98-2.15)	0.06	17/84	0.79 (0.44-1.42)	0.43
TNFA	rs1799724	CC	126/231	1.00 (ref)	0.001	31/231	1.00 (ref)	0.11	218/373	1.00 (ref)	0.53	93/373	1.00 (ref)	0.68
		CT	56/66	1.88 (1.21-2.93)		16/66	1.98 (0.98-3.99)		12/30	0.8 (0.39-1.63)		7/30	1.2 (0.49-2.95)	
		TT	9/7	3.17 (1.10-9.12)		1/7	1.12 (0.12-10.58)		0/0			0/0		
		CT/TT	65/73	2.00 (1.31-3.05)	0.001	17/73	1.90 (0.96-3.77)	0.07	n/a			n/a		
TNFA	rs1800629	GG	140/225	1.00 (ref)	0.81	39/225	1.00 (ref)	0.61	190/310	1.00 (ref)	0.09	74/310	1.00 (ref)	0.86
		GA	45/80	0.88 (0.57-1.38)		9/80	0.58 (0.26-1.29)		39/86	0.77 (0.50-1.19)		23/86	1.05 (0.61-1.81)	
		AA	3/3	1.62 (0.31-8.55)		2/3	3.53 (0.53-23.57)		2/9	0.33 (0.07-1.65)		2/9	1.03 (0.21-5.02)	
		GA/AA	48/83	0.91 (0.59-1.41)	0.67	11/83	0.69 (0.33-1.45)	0.33	41/95	0.73 (0.47-1.11)	0.14	25/95	1.05 (0.62-1.78)	0.85
TNFA	rs361525	GG	173/276	1.00 (ref)	0.78	42/276	1.00 (ref)	0.31	209/373	1.00 (ref)	0.58	92/373	1.00 (ref)	0.97
		GA	18/27	0.98 (0.50-1.95)		5/27	1.21 (0.42-3.48)		21/29	1.26 (0.69-2.32)		8/29	1.09 (0.47-2.57)	
		AA	0/1			1/1	9.11 (0.47-176.4)		0/1			0/1		
		GA/AA	18/28	0.95 (0.48-1.86)	0.87	6/28	1.41 (0.52-3.81)	0.50	21/30	1.22 (0.67-2.24)	0.51	8/30	1.05 (0.45-2.46)	0.90
TNFRSF1A	rs767455	TT	62/96	1.00 (ref)	0.90	15/96	1.00 (ref)	0.39	85/177	1.00 (ref)	0.49	36/177	1.00 (ref)	0.06
		TC	98/161	0.92 (0.60-1.41)		22/161	0.88 (0.42-1.84)		123/176	1.44 (1.01-2.06)		46/176	1.41 (0.85-2.32)	
		CC	39/55	1.07 (0.62-1.87)		13/55	1.56 (0.66-3.69)		22/52	0.92 (0.51-1.64)		17/52	1.84 (0.93-3.65)	
		TC/CC	137/216	0.96 (0.64-1.44)	0.84	35/216	1.05 (0.53-2.08)	0.88	145/228	1.32 (0.94-1.87)	0.11	63/228	1.50 (0.94-2.41)	0.09
TNFRSF1A	rs4149570	GG	66/115	1.00 (ref)	0.19	22/115	1.00 (ref)	0.76	177/314	1.00 (ref)	0.73	79/314	1.00 (ref)	0.61
		GT	104/154	1.27 (0.84-1.92)		20/154	0.67 (0.34-1.34)		49/86	0.97 (0.64-1.48)		17/86	0.81 (0.45-1.47)	
		TT	29/42	1.42 (0.78-2.56)		8/42	1.06 (0.42-2.68)		5/5	1.96 (0.52-7.30)		4/5	4.53 (1.08-19.09)	
		GT/TT	133/196	1.30 (0.87-1.93)	0.20	28/196	0.75 (0.40-1.43)	0.38	54/91	1.01 (0.67-1.53)	0.95	21/91	0.96 (0.55-1.68)	0.89
CCL2	rs1024611	TT	96/171	1.00 (ref)	0.54	26/171	1.00 (ref)	0.59	143/268	1.00 (ref)	0.42	68/268	1.00 (ref)	0.47
		TC	90/116	1.35 (0.91-1.99)		22/116	1.1 (0.57-2.12)		83/123	1.28 (0.89-1.83)		32/123	1.08 (0.66-1.75)	

		CC	11/22	0.79 (0.35-1.79)		1/22	0.25 (0.03-2.51)		5/14	0.76 (0.26-2.21)		0/14		
		TC/CC	101/138	1.26 (0.86-1.83)	0.23	23/138	0.99 (0.52-1.90)	0.98	88/137	1.23 (0.87-1.74)	0.25	32/137	0.96 (0.60-1.56)	0.88
CCL2	rs2857656	GG	91/166	1.00 (ref)	0.54	26/166	1.00 (ref)	0.52	74/154	1.00 (ref)	0.10	40/154	1.00 (ref)	0.63
		GC	85/112	1.35 (0.90-2.01)		21/112	1.03 (0.53-2.03)		108/187	1.16 (0.80-1.70)		45/187	0.94 (0.57-1.53)	
		CC	10/21	0.79 (0.33-1.85)		1/21	0.25 (0.02-2.61)		44/60	1.54 (0.94-2.54)		13/60	0.84 (0.41-1.71)	
		GC/CC	95/133	1.26 (0.86-1.86)	0.24	22/133	0.94 (0.48-1.83)	0.85	152/247	1.25 (0.88-1.79)	0.22	58/247	0.91 (0.57-1.45)	0.70
CCL2	rs4586	TT	64/141	1.00 (ref)	0.19	19/141	1.00 (ref)	0.74	21/45	1.00 (ref)	0.01	15/45	1.00 (ref)	0.30
		TC	99/128	1.67 (1.10-2.55)		26/128	1.46 (0.74-2.86)		96/203	1.13 (0.62-2.06)		45/203	0.65 (0.32-1.32)	
		CC	21/37	1.11 (0.57-2.15)		5/37	0.84 (0.25-2.81)		112/156	1.74 (0.95-3.20)		37/156	0.62 (0.30-1.29)	
		TC/CC	120/165	1.55 (1.03-2.31)	0.03	31/165	1.34 (0.70-2.59)	0.38	208/359	1.37 (0.77-2.44)	0.28	82/359	0.64 (0.33-1.25)	0.19
CCL2	rs13900	CC	96/171	1.00 (ref)	0.46	26/171	1.00 (ref)	0.63	143/266	1.00 (ref)	0.45	68/266	1.00 (ref)	0.46
		CT	90/117	1.34 (0.91-1.97)		22/117	1.09 (0.56-2.10)		82/123	1.27 (0.88-1.81)		32/123	1.07 (0.66-1.75)	
		TT	11/20	0.86 (0.37-1.97)		1/20	0.27 (0.03-2.74)		5/14	0.75 (0.26-2.19)		0/14		
		CT/TT	101/137	1.27 (0.87-1.85)	0.22	23/137	0.99 (0.52-1.91)	0.98	87/137	1.22 (0.86-1.73)	0.27	32/137	0.96 (0.59-1.56)	0.87
CCL5	rs3817655	TT	128/202	1.00 (ref)	0.70	32/202	1.00 (ref)	0.99	73/131	1.00 (ref)	0.72	41/131	1.00 (ref)	0.03
		TA	54/98	0.84 (0.54-1.29)		18/98	1.24 (0.64-2.41)		105/198	0.90 (0.62-1.33)		43/198	0.62 (0.38-1.03)	
		AA	7/8	1.28 (0.43-3.82)		0/8			53/76	1.13 (0.70-1.81)		16/76	0.52 (0.27-1.02)	
		TA/AA	61/106	0.87 (0.58-1.32)	0.52	18/106	1.13 (0.58-2.19)	0.71	158/274	0.97 (0.67-1.38)	0.85		0.59 (0.37-0.95)	0.03
CCL5	rs2280789	TT	140/236	1.00 (ref)	0.38	37/236	1.00 (ref)	0.85	136/267	1.00 (ref)	0.04	71/267	1.00 (ref)	0.11
		TC	56/72	1.25 (0.81-1.94)		13/72	1.23 (0.60-2.52)		80/114	1.47 (1.02-2.12)		29/114	0.89 (0.54-1.47)	
		CC	3/5	0.98 (0.21-4.54)		0/5			13/17	1.56 (0.71-3.42)		0/17		
		TC/CC	59/77	1.24 (0.81-1.89)	0.33	13/77	1.16 (0.56-2.37)	0.69	93/131	1.48 (1.04-2.11)	0.03	29/131	0.77 (0.47-1.27)	0.31
CCL5	rs2107538	CC	126/200	1.00 (ref)	0.96	30/200	1.00 (ref)	0.70	71/131	1.00 (ref)	0.46	40/131	1.00 (ref)	0.02
		CT	58/94	0.99 (0.65-1.51)		18/94	1.47 (0.75-2.87)		106/199	0.93 (0.63-1.37)		47/199	0.67 (0.41-1.11)	
		TT	6/9	0.99 (0.32-3.02)		0/9			53/73	1.24 (0.77-2.00)		13/73	0.45 (0.22-0.92)	
		CT/TT	64/103	0.99 (0.66-1.49)	0.96	18/103	1.32 (0.68-2.58)	0.41	159/272	1.01 (0.70-1.45)	0.95	60/272	0.61 (0.38-0.98)	0.04
CXCL5	rs425535	GG	144/240	1.00 (ref)	0.61	39/240	1.00 (ref)	0.72	94/142	1.00 (ref)	0.16	34/142	1.00 (ref)	0.51
		GA	40/63	1.01 (0.63-1.62)		11/63	1.01 (0.47-2.18)		106/198	0.78 (0.54-1.12)		54/198	1.10 (0.67-1.82)	
		AA	6/5	1.72 (0.48-6.15)		0/5			31/65	0.73 (0.44-1.23)		12/65	0.70 (0.33-1.47)	
		GA/AA	46/68	1.07 (0.68-1.68)	0.78	11/68	0.94 (0.44-2.02)	0.88	137/263	0.77 (0.54-1.09)	0.14	66/263	1.00 (0.62-1.62)	1.00
CRP	rs1205	CC	82/118	1.00 (ref)	0.41	24/118	1.00 (ref)	0.64	146/257	1.00 (ref)	0.80	60/257	1.00 (ref)	0.98
		CT	88/149	0.89 (0.59-1.35)		17/149	0.60 (0.30-1.20)		72/121	1.07 (0.74-1.55)		37/121	1.31 (0.81-2.11)	
		TT	19/35	0.77 (0.40-1.49)		7/35	1.12 (0.42-2.95)		12/25	0.76 (0.36-1.60)		3/25	0.50 (0.14-1.74)	
		CT/TT	107/184	0.87 (0.59-1.29)	0.48	24/184	0.69 (0.36-1.31)	0.26	84/146	1.01 (0.71-1.44)	0.94	40/146	1.16 (0.73-1.85)	0.52
CRP	rs1130864	CC	88/157	1.00 (ref)	0.20	26/157	1.00 (ref)	0.47	147/266	1.00 (ref)	0.44	60/266	1.00 (ref)	0.77
		CT	82/118	1.28 (0.85-1.91)		14/118	0.69 (0.33-1.44)		53/89	1.02 (0.68-1.55)		23/89	1.22 (0.70-2.13)	

		TT	20/24	1.38 (0.69-2.75)		8/24	2.19 (0.84-5.71)		5/18	0.50 (0.18-1.40)		3/18	0.83 (0.23-3.01)	
		CT/TT	102/142	1.29 (0.88-1.90)	0.19	22/142	0.93 (0.49-1.77)	0.83	58/107	0.94 (0.63-1.39)	0.74	26/107	1.15 (0.68-1.96)	0.60
CRP	rs1800947	GG	167/262	1.00 (ref)	0.90	40/262	1.00 (ref)	0.34	227/392	1.00 (ref)	0.14	100/392	1.00 (ref)	0.99
		GC	23/40	0.97 (0.54-1.73)		8/40	1.67 (0.70-4.01)		3/11	0.37 (0.10-1.40)		0/11		
		CC	1/2	0.92 (0.08-11.08)		0/2			0/0			0/0		
		GC/CC	24/42	0.97 (0.55-1.71)	0.91	8/42	1.61 (0.68-3.85)	0.28		n/a				
IL1A	rs17561	GG	95/154	1.00 (ref)	0.80	26/154	1.00 (ref)	0.79	161/287	1.00 (ref)	0.83	71/287	1.00 (ref)	0.62
		GT	83/118	1.30 (0.87-1.95)		18/118	1.14 (0.57-2.27)		62/108	0.99 (0.67-1.45)		29/108	1.12 (0.67-1.86)	
		TT	21/41	0.88 (0.48-1.63)		5/41	0.75 (0.26-2.17)		7/10	1.29 (0.47-3.55)		0/10		
		GT/TT	104/159	1.19 (0.82-1.74)	0.36	23/159	1.02 (0.54-1.95)	0.94	69/118	1.01 (0.70-1.47)	0.94	29/118	1.00 (0.61-1.66)	0.99
IL1A	rs1800587	CC	92/153	1.00 (ref)	0.78	26/153	1.00 (ref)	0.95	86/155	1.00 (ref)	0.99	37/155	1.00 (ref)	0.78
		CT	84/116	1.30 (0.87-1.95)		17/116	1.04 (0.52-2.10)		109/186	1.06 (0.74-1.54)		48/186	1.03 (0.63-1.69)	
		TT	20/39	0.88 (0.47-1.64)		6/39	0.93 (0.34-2.55)		35/64	0.97 (0.59-1.62)		15/64	0.88 (0.44-1.75)	
		CT/TT	104/155	1.19 (0.82-1.74)	0.36	23/155	1.01 (0.53-1.92)	0.97	144/250	1.04 (0.73-1.47)	0.82	63/250	0.99 (0.62-1.58)	0.96
IL1B	rs1143634	CC	108/180	1.00 (ref)	0.71	30/180	1.00 (ref)	0.98	172/306	1.00 (ref)	0.33	77/306	1.00 (ref)	0.99
		CT	76/103	1.32 (0.89-1.97)		15/103	1.06 (0.53-2.15)		52/96	0.97 (0.65-1.45)		21/96	0.86 (0.50-1.49)	
		TT	13/26	0.80 (0.38-1.66)		4/26	0.91 (0.28-2.91)		7/3	4.74 (1.16-19.3)		2/3	3.12 (0.46-21.05)	
		CT/TT	89/129	1.21 (0.83-1.76)	0.33	19/129	1.03 (0.53-1.97)	0.94	59/99	1.08 (0.73-1.59)	0.71	23/99	0.92 (0.54-1.57)	0.76
IL1B	rs1143627	TT	83/145	1.00 (ref)	0.19	28/145	1.00 (ref)	0.22	42/74	1.00 (ref)	0.65	15/74	1.00 (ref)	0.79
		TC	83/134	1.11 (0.74-1.66)		17/134	0.65 (0.33-1.29)		110/178	1.11 (0.70-1.76)		52/178	1.58 (0.82-3.04)	
		CC	32/33	1.52 (0.84-2.73)		5/33	0.63 (0.21-1.87)		79/153	0.93 (0.58-1.52)		33/153	1.06 (0.53-2.11)	
		TC/CC	115/167	1.20 (0.82-1.74)	0.35	22/167	0.64 (0.34-1.22)	0.18	189/331	1.03 (0.67-1.59)	0.89	85/331	1.33 (0.72-2.47)	0.36
IL1B	rs16944	GG	83/143	1.00 (ref)	0.22	27/143	1.00 (ref)	0.27	47/93	1.00 (ref)	0.92	21/93	1.00 (ref)	0.67
		GA	83/134	1.08 (0.72-1.61)		17/134	0.67 (0.33-1.33)		118/185	1.24 (0.80-1.92)		52/185	1.33 (0.74-2.38)	
		AA	31/32	1.52 (0.84-2.75)		5/32	0.67 (0.22-2.01)		66/125	1.05 (0.65-1.70)		26/125	0.90 (0.47-1.74)	
		GA/AA	114/166	1.17 (0.8-1.70)	0.43	22/166	0.67 (0.35-1.27)	0.22	184/310	1.17 (0.78-1.76)	0.46	78/310	1.15 (0.67-2.00)	0.61
IL1R1	rs2041748	CC	112/178	1.00 (ref)	0.98	34/178	1.00 (ref)	0.12	197/349	1.00 (ref)	0.68	86/349	1.00 (ref)	1.00
		CT	79/118	1.12 (0.76-1.65)		15/118	0.66 (0.34-1.31)		31/52	1.18 (0.71-1.95)		12/52	1.03 (0.51-2.07)	
		TT	8/17	0.71 (0.28-1.80)		1/17	0.31 (0.04-2.52)		2/4	0.75 (0.12-4.71)		1/4	0.85 (0.09-8.34)	
		CT/TT	87/135	1.06 (0.73-1.55)	0.75	16/135	0.62 (0.32-1.20)		33/56	1.15 (0.70-1.88)	0.58	13/56	1.02 (0.52-2.00)	
IL1R2	rs2228139	CC	185/281	1.00 (ref)	0.23	41/281	1.00 (ref)	0.12	202/365	1.00 (ref)	0.60	93/365	1.00 (ref)	0.20
		CG	12/27	0.64 (0.31-1.33)		7/27	1.48 (0.57-3.87)		28/39	1.16 (0.68-1.98)		6/39	0.60 (0.24-1.48)	
		GG	0/0			1/0			1/1	0.99 (0.06-16.76)		0/1		
		CG/GG		n/a		8/27	1.74 (0.70-4.34)		29/40	1.16 (0.68-1.96)	0.58	6/40	0.57 (0.23-1.41)	
IL1RN	rs4251961	TT	74/115	1.00 (ref)	0.80	22/115	1.00 (ref)	0.95	160/266	1.00 (ref)	0.30	63/266	1.00 (ref)	0.73
		TC	88/147	0.95 (0.63-1.45)		19/147	0.68 (0.34-1.36)		61/123	0.77 (0.53-1.13)		34/123	1.27 (0.78-2.07)	

		CC	27/46	0.94 (0.52-1.69)		9/46	1.18 (0.48-2.92)		9/16	0.95 (0.39-2.28)		2/16	0.58 (0.13-2.66)	
		TC/CC	115/193	0.95 (0.64-1.41)	0.80	28/193	0.78 (0.41-1.49)	0.46	70/139	0.79 (0.55-1.14)	0.21	36/139	1.19 (0.74-1.93)	0.47
IL1RN	rs419598	TT	103/166	1.00 (ref)	0.96	25/166	1.00 (ref)	0.70	178/305	1.00 (ref)	0.99	79/305	1.00 (ref)	0.48
		TC	67/106	1.15 (0.76-1.74)		21/106	1.23 (0.63-2.38)		38/73	0.91 (0.58-1.43)		16/73	0.90 (0.49-1.67)	
		CC	14/29	0.85 (0.42-1.73)		2/29	0.45 (0.10-2.06)		5/6	1.51 (0.43-5.35)		0/6		
		TC/CC	81/135	1.09 (0.74-1.60)	0.67	23/135	1.06 (0.56-2.00)	0.86	43/79	0.96 (0.62-1.47)	0.84	16/79	0.85 (0.46-1.56)	0.60
IL1RN	rs454078	AA	105/164	1.00 (ref)	0.76	26/164	1.00 (ref)	0.62	198/344	1.00 (ref)	0.79	87/344	1.00 (ref)	0.67
		AT	78/123	1.07 (0.72-1.58)		22/123	1.05 (0.55-2.00)		31/57	0.93 (0.56-1.53)		13/57	0.97 (0.49-1.90)	
		TT	16/25	1.07 (0.53-2.14)		2/25	0.50 (0.11-2.31)		2/4	0.97 (0.16-5.81)		0/4		
		AT/TT	94/148	1.07 (0.73-1.55)	0.73	24/148	0.96 (0.51-1.79)	0.89	33/61	0.93 (0.57-1.51)	0.78	13/61	0.91 (0.47-1.78)	0.79
IL1RN	rs579543	CC	108/159	1.00 (ref)	0.48	26/159	1.00 (ref)	0.34	175/320	1.00 (ref)	0.30	77/320	1.00 (ref)	0.95
		CT	75/127	0.89 (0.60-1.32)		22/127	0.95 (0.50-1.81)		52/80	1.24 (0.82-1.88)		22/80	1.17 (0.67-2.05)	
		TT	15/26	0.83 (0.41-1.69)		2/26	0.39 (0.08-1.80)		4/5	1.25 (0.32-4.89)		0/5		
		CT/TT	90/153	0.88 (0.60-1.28)	0.49	24/153	0.84 (0.45-1.58)	0.59	56/85	1.25 (0.83-1.86)	0.28	22/85	1.10 (0.63-1.91)	0.74
IL6R	rs2228145	AA	79/117	1.00 (ref)	0.94	11/117	1.00 (ref)	0.06	170/292	1.00 (ref)	0.83	75/292	1.00 (ref)	0.53
		AC	87/145	0.84 (0.56-1.27)		30/145	1.95 (0.91-4.19)		56/104	0.92 (0.62-1.37)		23/104	0.92 (0.53-1.59)	
		CC	33/48	1.13 (0.65-1.99)		9/48	2.39 (0.88-6.47)		5/9	1.17 (0.36-3.75)		1/9	0.45 (0.05-3.72)	
		AC/CC	120/193	0.91 (0.62-1.33)	0.62	39/193	2.04 (0.98-4.26)	0.06	61/113	0.94 (0.64-1.38)	0.74	24/113	0.88 (0.51-1.51)	0.64
IL6	rs10499563	TT	130/201	1.00 (ref)	0.45	30/201	1.00 (ref)	0.88	152/261	1.00 (ref)	1.00	59/261	1.00 (ref)	0.30
		TC	65/96	1.03 (0.68-1.54)		17/96	0.99 (0.50-1.94)		67/125	0.96 (0.66-1.40)		36/125	1.29 (0.79-2.10)	
		CC	4/14	0.41 (0.12-1.33)		3/14	1.23 (0.31-4.91)		11/16	1.10 (0.48-2.50)		5/16	1.33 (0.46-3.89)	
		TC/CC	69/110	0.94 (0.64-1.40)	0.78	20/110	1.02 (0.53-1.94)	0.96	78/141	0.98 (0.69-1.40)	0.91	41/141	1.30 (0.81-2.06)	0.28
IL6	rs1800797	GG	88/123	1.00 (ref)	0.51	23/123	1.00 (ref)	0.99	201/352	1.00 (ref)	0.93	89/352	1.00 (ref)	0.79
		GA	92/158	0.89 (0.60-1.33)		20/158	0.72 (0.36-1.41)		25/47	0.85 (0.49-1.48)		11/47	1.11 (0.53-2.31)	
		AA	19/31	0.84 (0.43-1.64)		7/31	1.34 (0.50-3.59)		2/0			0/0		
		GA/AA	111/189	0.88 (0.60-1.29)	0.52	27/189	0.82 (0.43-1.54)	0.53	27/47	0.91 (0.53-1.56)	0.72		n/a	
IL6	rs1800796	GG	169/269	1.00 (ref)	0.96	47/269	1.00 (ref)	0.10	176/319	1.00 (ref)	0.78	76/319	1.00 (ref)	0.24
		GC	30/41	1.20 (0.70-2.05)		3/41	0.40 (0.11-1.40)		52/82	1.09 (0.73-1.64)		21/82	1.17 (0.67-2.04)	
		CC	0/3			0/3			2/4	0.8 (0.13-4.82)		3/4	3.32 (0.68-16.24)	
		GC/CC	30/44	1.11 (0.65-1.89)	0.70	3/44	0.36 (0.10-1.26)	0.11	54/86	1.08 (0.72-1.61)	0.72	24/86	1.27 (0.74-2.17)	0.38
IL6	rs1800795	GG	88/123	1.00 (ref)	0.56	20/123	1.00 (ref)	0.29	204/356	1.00 (ref)	0.64	89/356	1.00 (ref)	0.92
		GC	91/152	0.92 (0.62-1.38)		21/152	0.94 (0.46-1.89)		24/48	0.79 (0.46-1.38)		11/48	1.09 (0.53-2.27)	
		CC	19/33	0.83 (0.43-1.62)		9/33	1.97 (0.78-5.01)		2/1	2.56 (0.20-33.38)		0/1		
		GC/CC	110/185	0.90 (0.62-1.33)	0.61	30/185	1.11 (0.58-2.14)	0.74	26/49	0.83 (0.48-1.43)	0.50	11/49	1.07 (0.52-2.21)	0.86
IL8	rs4073	TT	67/106	1.00 (ref)	0.80	17/106	1.00 (ref)	0.81	6/22	1.00 (ref)	0.51	3/22	1.00 (ref)	0.73
		TA	92/150	0.95 (0.62-1.45)		25/150	1.01 (0.50-2.03)		81/138	1.99 (0.76-5.24)		32/138	1.61 (0.44-5.93)	

		AA	30/52	0.94 (0.53-1.66)		8/52	1.15 (0.45-2.95)		141/244	1.93 (0.74-5.07)		61/244	1.58 (0.43-5.72)	
		TA/AA	122/202	0.95 (0.63-1.41)	0.79	33/202	1.04 (0.54-2.02)	0.91	222/382	1.96 (0.76-5.06)	0.16	93/382	1.59 (0.45-5.67)	0.47
IL8	rs2227306	CC	86/127	1.00 (ref)	0.49	20/127	1.00 (ref)	0.59	175/312	1.00 (ref)	1.00	78/312	1.00 (ref)	0.76
		CT	77/128	0.92 (0.60-1.39)		23/128	1.29 (0.64-2.61)		41/63	1.11 (0.70-1.75)		16/63	1.22 (0.65-2.29)	
		TT	20/42	0.81 (0.43-1.52)		6/42	1.18 (0.42-3.32)		2/7	0.54 (0.11-2.75)		1/7	0.68 (0.08-5.89)	
		CT/TT	97/170	0.89 (0.6-1.32)	0.56	29/170	1.27 (0.65-2.47)	0.48	43/70	1.06 (0.68-1.65)	0.81	17/70	1.16 (0.63-2.15)	0.63
IL16	rs4778889	TT	141/203	1.00 (ref)	0.10	31/203	1.00 (ref)	1.00	83/146	1.00 (ref)	0.92	34/146	1.00 (ref)	0.69
		TC	52/92	0.76 (0.49-1.16)		19/92	1.38 (0.71-2.65)		111/192	1.02 (0.71-1.48)		50/192	1.10 (0.67-1.82)	
		CC	5/14	0.48 (0.15-1.57)		0/14			32/65	1.02 (0.60-1.72)		16/65	1.13 (0.57-2.23)	
		TC/CC	57/106	0.72 (0.48-1.10)	0.13	19/106	1.20 (0.63-2.31)	0.57	143/257	1.02 (0.72-1.45)	0.90	66/257	1.11 (0.69-1.79)	0.67
IL17A	rs7747909	GG	117/175	1.00 (ref)	0.54	25/175	1.00 (ref)	0.23	190/326	1.00 (ref)	0.64	86/326	1.00 (ref)	0.23
		GA	74/112	1.08 (0.73-1.60)		20/112	1.45 (0.74-2.85)		37/74	0.82 (0.52-1.28)		12/74	0.63 (0.32-1.24)	
		AA	6/22	0.51 (0.20-1.32)		4/22	1.67 (0.49-5.67)		4/5	1.48 (0.38-5.80)		1/5	0.94 (0.09-9.27)	
		GA/AA	80/134	0.99 (0.68-1.45)	0.96	24/134	1.48 (0.78-2.82)	0.23	41/79	0.86 (0.55-1.32)	0.48	13/79	0.65 (0.34-1.25)	0.19
IL17A	rs1974226	GG	124/201	1.00 (ref)	0.56	36/201	1.00 (ref)	0.25	176/320	1.00 (ref)	0.25	84/320	1.00 (ref)	0.45
		GA	64/101	1.05 (0.71-1.58)		14/101	0.81 (0.41-1.61)		47/73	1.23 (0.81-1.88)		15/73	0.86 (0.46-1.61)	
		AA	10/11	1.37 (0.54-3.44)		0/11			7/6	1.48 (0.47-4.67)		1/6	0.46 (0.05-4.06)	
		GA/AA	74/112	1.09 (0.74-1.60)		14/112	0.74 (0.37-1.46)	0.38	54/79	1.26 (0.84-1.89)		16/79	0.82 (0.45-1.51)	0.53
FGF2	rs308379	AA	79/145	1.00 (ref)	0.05	22/145	1.00 (ref)	0.84	158/289	1.00 (ref)	0.73	65/289	1.00 (ref)	0.32
		AT	86/125	1.33 (0.88-2.00)		21/125	1.12 (0.57-2.21)		63/102	1.07 (0.73-1.58)		31/102	1.35 (0.82-2.23)	
		TT	32/39	1.70 (0.96-3.02)		6/39	1.04 (0.38-2.88)		8/12	1.08 (0.42-2.79)		3/12	1.14 (0.30-4.31)	
		AT/TT	118/164	1.41 (0.96-2.07)	0.08	27/164	1.10 (0.58-2.08)	0.76	71/114	1.07 (0.74-1.56)	0.72	34/114	1.33 (0.82-2.17)	0.25
FGF2	rs1048201	CC	130/217	1.00 (ref)	0.14	40/217	1.00 (ref)	0.25	197/362	1.00 (ref)	0.17	89/362	1.00 (ref)	0.84
		CT	54/79	1.16 (0.76-1.78)		7/79	0.50 (0.21-1.21)		32/40	1.42 (0.85-2.38)		11/40	1.06 (0.51-2.19)	
		TT	13/13	1.90 (0.83-4.36)		2/13	0.91 (0.19-4.45)		2/2	1.59 (0.22-11.77)		0/2		
		CT/TT	67/92	1.26 (0.85-1.88)	0.25	9/92	0.56 (0.25-1.24)	0.15	34/42	1.43 (0.86-2.36)	0.16	11/42	0.99 (0.48-2.05)	0.98
NOD2	rs2066842	CC	104/168	1.00 (ref)	0.40	35/168	1.00 (ref)	0.02	200/364	1.00 (ref)	0.23	88/364	1.00 (ref)	0.36
		CT	74/121	0.83 (0.55-1.25)		14/121	0.45 (0.22-0.92)		31/38	1.60 (0.94-2.72)		12/38	1.56 (0.75-3.25)	
		TT	10/19	0.83 (0.36-1.93)		1/19	0.25 (0.03-1.98)		0/3			0/3		
		CT/TT	84/140	0.83 (0.56-1.23)	0.36	15/140	0.42 (0.21-0.84)	0.02	31/41	1.50 (0.89-2.54)	0.13	12/41	1.5 (0.72-3.11)	0.28

^a Based on from 254 EA (75.8%) and 332 (72.5%) AA cases with available data on ER status.

^b OR, odds ratio; 95%CI, 95% confidence interval

^c Adjusted for age at diagnosis, education, body mass index, family history of breast cancer, history of benign breast disease, menopausal status, smoking status, and proportion of European ancestry.

^d *P*-trend for genetic dose response determined by coding genotypes as having 0, 1, or 2 variant allele, which was subsequently analyzed as an ordinal variable.

^e *P* for heterogeneity from dominant models (heterozygous and homozygous variant combined vs. homozygous common).