

Table 1. Publications reporting on metabolic gene polymorphisms in populations of African descent

Author (year) Country	Ethnic Groups (n)	Recruitment Period	Control Source	Cases (n)			Controls (n)			Crude OR (95% CI)	
Breast											
GSTM1 (deletion)				Present	Null		Present	Null		Null vs. Present	
Van Emburgh (2008) ⁵³ USA	C (857) AA (143)	1998-2004	Hospital	37	19		59	28		1.08 (0.50-2.34)	
Bailey (1998a) ⁴⁵ USA	C (326) AA (118)	1982-1996	Healthy	39	20		35	24		0.75 (0.33-1.69)	
GSTT1 (deletion)				Present	Null		Present	Null		Null vs. Present	
Bailey (1998a) ⁴⁵ USA	C (326) AA (118)	1982-1996	Healthy	47	12		42	17		0.63 (0.24-1.59)	
Van Emburgh (2008) ⁵³ USA	C (857) AA (143)	1998-2004	Hospital	41	15		71	16		1.62 (0.67-3.91)	
GSTP1 (I105V) rs947894				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	Val/Val vs. Ile/Ile	Ile/Val vs. Ile/Ile
Van Emburgh (2008) ⁵³ USA	C (778) AA (133)	1998-2004	Hospital	14	29	13	25	39	13	1.79 (0.58-5.51)	1.33 (0.55-3.27)
GSTP1 (A114V) rs1799811				Ala/Ala	Ala/Val	Val/Val	Ala/Ala	Ala/Val	Val/Val	*Val vs. Ala/Ala	
Van Emburgh (2008) ⁵³ USA	C (771) AA (128)	1998-2004	Hospital	49	5	0	70	4	0	1.79 (0.36-9.43)	
CYP1A1 (mspI) rs4646903				wt/wt	wt/m2	m2/m2	wt/wt	wt/m2	m2/m2	m2/m2 vs. wt/wt	wt/m2 vs. wt/wt
Bailey (1998a) ⁴⁵ USA	C (326) AA (118)	1982-1996	Healthy	42	15	2	33	23	3	0.52 (0.04-4.89)	0.51 (0.21-1.22)
Kato (2009) ⁴⁸ USA	AA (388)	2001-2003	Healthy	117	68	9	109	67	13	0.64 (0.23-1.71)	0.95 (0.60-1.48)
Li Y (2004) ⁴⁶ USA	C (828) AA (545)	1993-2001	Healthy	155	93	17	165	102	13	1.39 (0.61-3.23)	0.97 (0.67-1.41)
Okobia (2005) ⁴⁹ Nigeria	A (438)	2002-2004	Hospital	135	69	16	130	71	17	0.91 (0.41-2.00)	0.94 (0.61-1.44)
Taioli (1999) ⁴⁷ USA	C (223) AA (143)	1995	Healthy	9	12	4	69	44	5	6.13 (0.99-33.87)	2.09 (0.73-6.09)
CYP1A1 (exon7)				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Taioli (1999) ⁴⁷ USA	C (223) AA (141)	1995	Healthy	24	2	0	110	5	0	1.83 (0.16-11.98)	
CYP1A1 (Ile/Val) rs1048943				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Bailey (1998a) ⁴⁵	C (326)	1982-1996	Healthy	58	1	0	59	0	0	---	

USA Li Y (2004) ⁴⁶	AA (118) C (834)	1993-2001	Healthy	259	12	0	274	11	0	1.15 (0.46-2.94)	
USA Rebbeck (2007) ⁷⁵	AA (556) C (1259)	1999-2002	Healthy	187	11 ^a	---	404	43 ^a	---	0.55 (0.25-1.12)	
CYP1A1 (Thr461Asn) rs1799814				Thr/Thr	Thr/Asn	Asn/Asn	Thr/Thr	Thr/Asn	Asn/Asn	*Asn vs. Thr/Thr	
Bailey (1998a) ⁴⁵	C (326)	1982-1996	Healthy	58	1	0	59	0	0	---	
USA Li Y (2004) ⁴⁶	AA (118) C (834)	1993-2001	Healthy	267	3	1	278	7	0	0.59 (0.13-2.37)	
USA	AA (556)										
CYP1A1 (African-American specific)				wt/wt	wt/var	var/var	wt/wt	wt/var	var/var	*Var vs. wt/wt	
Bailey (1998a) ⁴⁵	C (326)	1982-1996	Healthy	47	11	1	45	14	0	0.82 (0.31-2.15)	
USA Kato (2009) ⁴⁸	AA (118) AA (388)	2001-2003	Healthy	157	32	2	170	17	0	2.17 (1.12-4.30)	
USA Li Y (2004) ⁴⁶	C (828)	1993-2001	Healthy	218	47	0	227	47	6	0.92 (0.58-1.46)	
USA Okobia (2005) ⁴⁹	AA (545) A (456)	2002-2004	Hospital	176	52	1	172	53	2	0.94 (0.60-1.48)	
Nigeria Taioli (1999) ⁴⁷	C (223)	1995	Healthy	23	4	0	101	18	0	0.98 (0.22-3.37)	
USA	AA (146)										
CYP1A2 (C163A) rs762551				C/C	*A		C/C	*A		*A vs. C/C	
Rebbeck (2007) ⁷⁵	C (1164)	1999-2002	Healthy	32	137		67	340		0.84 (0.52-1.39)	
USA	AA (576)										
CYP1B1 (V432L) rs1056836				Val/Val	Leu/Val	Leu/Leu	Val/Val	Leu/Val	Leu/Leu	Leu/Leu vs. Val/Val	Leu/Val vs. Val/Val
Bailey (1998b) ⁵²	C (328)	1982-1996	Hospital	27	27	5	26	30	3	1.60 (0.28-11.30)	0.87 (0.38-1.96)
USA Kato (2009) ⁴⁸	AA (118) AA (388)	2001-2003	Healthy	106	68	8	103	66	20	0.39 (0.14-0.98)	1.00 (0.63-1.58)
USA Okobia (2009) ⁵⁴	A (454)	2002-2004	Hospital	167	57	4	182	39	5	0.87 (0.17-4.13)	1.59 (0.98-2.59)
Nigeria Van Emburgh (2008) ⁵³	C (793)	1998-2004	Hospital	28	23	1	43	28	6	0.26 (0.01-2.32)	1.26 (0.57-2.78)
USA	AA (129)										
CYP1B1 (A119S) rs1056827				Ala/Ala	Ala/Ser	Ser/Ser	Ala/Ala	Ala/Ser	Ser/Ser	Ser/Ser vs. Ala/Ala	Ala/Ser vs. Ala/Ala
Van Emburgh (2008) ⁵³	C (785)	1998-2004	Hospital	19	21	15	17	41	19	0.71 (0.25-2.00)	0.46 (0.18-1.15)
USA	AA (132)										
CYP1B1 (N453S) rs1800440				Asn/Asn	Asn/Ser	Ser/Ser	Asn/Asn	Asn/Ser	Ser/Ser	*Ser vs. Asn/Asn	
Bailey (1998b) ⁵²	C (328)	1982-1996	Hospital	56	3	0	55	4	0	0.74 (0.10-4.59)	
USA	AA (118)										

Rebbeck (2007) ⁷⁵ USA	C (1178) AA (618)	1999-2002	Healthy	164	20 ^a	---	402	32 ^a	---	1.53 (0.80-2.85)	
CYP3A4 (A293G) rs2740574				A/A	A/G	G/G	A/A	A/G	G/G	G/G vs. A/A	A/G vs. A/A
Kato (2009) ⁴⁸ USA	AA (388)	2001-2003	Healthy	31	81	82	23	84	82	0.74 (0.38-1.44)	0.72 (0.37-1.39)
Rebbeck (2007) ⁷⁵ USA	C (1225) AA (608)	1999-2002	Healthy	43	137 ^a	---	96	332 ^a	---	---	0.92 ^b (0.60-1.43)
CYP17 (5'-UTR) rs743572				T/T	T/C	C/C	T/T	T/C	C/C	C/C vs. T/T	T/C vs. T/T
Kato (2009) ⁴⁸ USA	AA (388)	2001-2003	Healthy	70	82	32	82	78	39	1.29 (0.68-2.45)	1.23 (0.77-1.97)
Weston (1998) ⁶³ USA	C (224) L (84) AA (55)	1994-1996	Healthy	7	10	3	15	18	2	3.21 (0.28-44.70)	1.19 (0.31-4.66)
NAT1*10 rs1057126; rs15561				non *10	*10		non *10	*10		*10 vs. non *10	
Millikan (2000) ⁷⁶ USA	C (563) AA (391)	1993-1996	Healthy	58	141		47	145		0.79 (0.49-1.26)	
MTHFR (C677T) rs1801133				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Le Marchand (2004) ^{77#} USA	L (900) AA (885) C (735) As (728) PI (355)	1993-1996	Healthy	196	47	3	490	140	9	0.83 (0.14-3.39)	0.84 (0.57-1.23)
MTHFR (A1298C) rs1801131				A/A	A/C	C/C	A/A	A/C	C/C	C/C vs. A/A	A/C vs. A/C
Le Marchand (2004) ^{77#} USA	L (900) AA (885) C (735) As (728) PI (355)	1993-1996	Healthy	171	68	7	433	187	19	0.93 (0.33-2.37)	0.92 (0.65-1.29)
SULT1A1 (R213H) rs9282861				Arg/Arg	*His		Arg/Arg	*His		*His vs. Arg/Arg	
Rebbeck (2007) ⁷⁵ USA	C (981) AA (490)	1999-2002	Healthy	85	59		193	153		0.88 (0.58-1.32)	
COMT (G1947A) rs4680				G/G	G/A	A/A	G/G	G/A	A/A	A/A vs. G/G	G/A vs. G/G
Millikan (1998) ⁷⁸ USA	C (768) AA (528)	1993-1996	Healthy	129	106	30	110	119	34	0.75 (0.42-1.36)	0.76 (0.52-1.11)
Rebbeck (2007) ⁷⁵ USA	C (1151) AA (583)	1999-2000	Healthy	149	23 ^a	---	372	39 ^a	---	---	1.47 (0.81-2.63) ^b
Prostate											

<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Mallick (2007) ³⁴ Guadeloupe	A (268)	2003-2004	Healthy	108	26		98	36		0.66 (0.35-1.21)	
Agalliu (2006) ⁷⁹ USA	C (1081) AA (46)	1993-1996	Healthy	22	9		8	7		0.47 (0.11-2.04)	
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Mallick (2007) ³⁴ Guadeloupe	A (268)	2003-2004	Healthy	104	30		85	49		0.50 (0.28-0.88)	
Agalliu (2006) ⁷⁹ USA	C (1080) AA (46)	1993-1996	Healthy	24	7		11	4		0.80 (0.16-4.56)	
<i>GSTP1 (I105V) rs947894</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	Val/Val vs. Ile/Ile	Ile/Val vs. Ile/Ile
Rybicki (2006) ⁸⁰ USA	C (503) AA (378)	2001-2004	Healthy	82	146	46	29	59	16	1.02 (0.48-2.23)	0.88 (0.50-1.51)
Agalliu (2006) ⁷⁹ USA	C (1081) AA (46)	1993-1996	Healthy	11	16	4	1	12	2	0.18 (0.00-4.88)	0.12 (0.00-1.10)
<i>GSTA1 (C69T) rs3957356</i>				AA	AB	BB	AA	AB	BB	BB vs. AA	AB vs. AA
Ning (2004) ⁸¹ USA	C (335) AA (156)	1996-2002	Healthy	39	45	9	25	31	7	0.82 (0.24-2.97)	0.93 (0.45-1.94)
<i>GSTA2 (G335C) rs1051739</i>				GG	GC	CC	GG	GC	CC	CC vs. GG	GC vs. GG
Ning (2004) ⁸¹ USA	C (335) AA (156)	1996-2002	Healthy	49	36	8	30	26	7	0.70 (0.20-2.53)	0.85 (0.41-1.77)
<i>CYP1B1 (R48G) rs10012</i>				C/C	C/G	G/G	C/C	C/G	G/G	G/G vs. C/C	C/G vs. C/C
Beuten (2009)^{35#} USA	C (1452) L (709) AA (291)	2001-?	Healthy	13	39	15	43	58	32	1.55 (0.59-4.07)	2.22 (1.01-5.09)
<i>CYP3A4 (A293G) rs2740574</i>				A/A	A/G	G/G	A/A	A/G	G/G	G/G vs. A/A	A/G vs. A/A
Sarma (2008) ⁵⁵ USA	AA (467)	1995-2002	Healthy	17	66	45	40	149	150	0.71 (0.35-1.46)	1.04 (0.53-2.11)
Bangsi (2006) ⁵⁶ USA	C (322) AA (248)	1996-1998	Healthy	21	66	58	20	48	35	1.58 (0.70-3.54)	1.31 (0.60-2.85)
Kittles (2002) ⁵⁸ USA; Nigeria	C (309)	N/A	Healthy	4	32	48	23	44	69	4.00 (1.24-16.79)	4.18 (1.24-18.04)
	AA (220) A (159)			3	23	51	1	20	61	0.28 (0.01-3.63)	0.38 (0.01-5.32)
Paris (1999) ⁵⁷ USA	AA (290) L (121) C (117) As (80)	1993-1998	Healthy	30	64	80	22	62	32	1.83 (0.87-3.84)	0.76 (0.37-1.52)
<i>CYP3A4 (intron 10) rs2242480</i>				A/A	A/G	G/G	A/A	A/G	G/G	G/G vs. A/A	A/G vs. A/A

Sarma (2008) ⁵⁵ USA	AA (473)	1995-2002	Healthy	67	53	11	183	133	26	1.16 (0.49-2.58)	1.09 (0.70-1.70)
<i>CYP3A4 (3'-UTR)</i> <i>rs12333983</i>				A/A	A/T	T/T	A/A	A/T	T/T	T/T vs. A/A	A/T vs. A/A
Sarma (2008) ⁵⁵ USA	AA (449)	1995-2002	Healthy	55	57	13	141	139	44	0.76 (0.35-1.57)	1.05 (0.66-1.67)
<i>CYP3A5*3</i> <i>rs776746</i>				*1/*1	*1/*3	*3/*3	*1/*1	*1/*3	*3/*3	*3/*3 vs. *1/*1	*1/*3 vs. *1/*1
Plummer (2003) ⁸² USA	C (834) AA (38)	N/A	Healthy	14	18	6	17	16	5	1.46 (0.29-7.40)	1.37 (0.46-4.06)
<i>CYP3A43 (P340A)</i> <i>rs680055</i>				Pro/Pro	Pro/Ala	Ala/Ala	Pro/Pro	Pro/Ala	Ala/Ala	Ala/Ala vs. Pro/Pro	Pro/Ala vs. Pro/Pro
Stone (2005) ³⁶ USA	C (647) AA (270)	1998-2003	Healthy	57	40	19	85	61	8	3.54 (1.36-9.94)	0.98 (0.56-1.70)
<i>CYP17</i> <i>rs17115144</i>				T/T	T/C	C/C	T/T	T/C	C/C	C/C vs. T/T	T/C vs. T/T
Beuten (2009)^{35#} USA	C (1452) L (709) AA (291)	2001-?	Healthy	8	14	8	51	47	13	3.92 (1.04-14.43)	1.90 (0.69-5.70)
<i>CYP17 (5'-UTR)</i> <i>rs743572</i>				T/T	T/C	C/C	T/T	T/C	C/C	C/C vs. T/T	T/C vs. T/T
Sarma (2008) ⁵⁵ USA	AA (448)	1995-2002	Healthy	52	51	23	106	183	33	1.42 (0.72-2.78)	0.57 (0.35-0.92)
Cicek (2004) ⁶² USA	C (794) AA (76)	N/A	Healthy	14	19	5	19	13	6	1.13 (0.22-5.50)	1.98 (0.66-5.98)
Stanford (2002) ⁵⁹ USA	C (1083) AA (45)	1993-1996	Healthy	10	18	2	6	7	2	0.60 (0.04-10.62)	1.54 (0.32-7.12)
Kittles (2001) ⁶⁰ USA	AA (182) C (74)	N/A	Healthy	22	38	11	55	46	10	2.75 (0.91-8.31)	2.07 (1.02-4.20)
Lunn (1999) ⁶¹ USA	C (267) AA (20)	N/A	Hospital	4	6	2	4	3	1	2.00 (0.07-147.04)	2.00 (0.19-21.63)
<i>CYP17 (intron 7)</i> <i>rs10883783</i>				A/A	A/T	T/T	A/A	A/T	T/T	T/T vs. A/A	A/T vs. A/A
Sarma (2008) ⁵⁵ USA	AA (472)	1995-2002	Healthy	89	36	6	231	97	13	1.20 (0.36-3.51)	0.96 (0.59-1.55)
<i>CYP17 (exon 1 - codon 65)</i> <i>rs6163</i>				G/G	G/T	T/T	G/G	G/T	T/T	T/T vs. G/G	G/T vs. G/G
Sarma (2008) ⁵⁵ USA	AA (472)	1995-2002	Healthy	54	52	25	114	192	35	1.51 (0.78-2.88)	0.57 (0.36-0.92)
<i>CYP17 (exon 1 - codon 46)</i> <i>rs6162</i>				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Sarma (2008) ⁵⁵ USA	AA (472)	1995-2002	Healthy	53	53	25	112	190	35	1.51 (0.78-2.89)	0.60 (0.37-0.95)
<i>CYP19 (exon 8 - codon 264)</i> <i>rs700519</i>				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C

Sarma (2008) ⁵⁵ USA	AA (472)	1995-2002	Healthy	91	37	3	236	93	12	0.65 (0.11-2.48)	1.03 (0.64-1.65)
CYP19 rs11636639				A/A	A/C	C/C	A/A	A/C	C/C	C/C vs. A/A	A/C vs. A/A
Beuten (2009)^{35#} USA	C (1452) L (709) AA (291)	2001-?	Healthy	23	31	28	60	71	31	2.36 (1.10-5.05)	1.14 (0.57-2.28)
CYP19 rs13751592				A/A	A/G	G/G	A/A	A/G	G/G	G/G vs. A/A	A/G vs. A/A
Beuten (2009)^{35#} USA	C (1452) L (709) AA (291)	2001-?	Healthy	40	32	7	72	22	13	0.97 (0.30-2.88)	2.88 (1.39-6.03)
CYP27B1 rs1048691				G/G	G/A	A/A	G/G	G/A	A/A	A/A vs. G/G	G/A vs. G/G
Beuten (2009)^{35#} USA	C (1452) L (709) AA (291)	2001-?	Healthy	33	44	5	54	80	28	0.29 (0.08-0.88)	0.90 (0.49-1.66)
NAT2 (C1638T) rs1112005				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Hooker (2008) ⁸³ USA	AA (555)	2001-2004	Healthy	163	76	15	188	95	18	0.97 (0.44-2.11)	0.92 (0.63-1.35)
NAT2 (C234T) rs7832071				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Hooker (2008) ⁸³ USA	AA (555)	2001-2004	Healthy	140	84	30	148	114	39	0.81 (0.46-1.43)	0.78 (0.53-1.14)
NAT2 (T114I) rs1801280				Thr/Thr	Thr/Ile	Ile/Ile	Thr/Thr	Thr/Ile	Ile/Ile	Ile/Ile vs. Thr/Thr	Thr/Ile vs. Thr/Thr
Hooker (2008) ⁸³ USA	AA (555)	2001-2004	Healthy	133	105	16	143	137	21	0.82 (0.38-1.73)	0.82 (0.57-1.18)
NAT2 (Q197R) rs1799930				Gln/Gln	Gln/Arg	Arg/Arg	Gln/Gln	Gln/Arg	Arg/Arg	Arg/Arg vs. Gln/Gln	Gln/Arg vs. Gln/Gln
Hooker (2008) ⁸³ USA	AA (555)	2001-2004	Healthy	132	107	15	164	113	24	0.67 (0.31-1.42)	1.02 (0.70-1.47)
MTHFR (C677T) rs1801133				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Singal (2004) ⁸⁴ USA	C (83) AA (40)	1998-2002	Hospital	21	4	0	10	5	0	---	0.38 (0.06-2.26)
MTHFR (A1298C) rs1801131				A/A	A/C	C/C	A/A	A/C	C/C	C/C vs. A/A	A/C vs. A/C
Singal (2004) ⁸⁴ USA	C (83) AA (40)	1998-2002	Hospital	11	11	3	8	6	1	2.18 (0.14-128.62)	1.33 (0.29-6.38)
SULT1A1 (R213H) rs9282861				Arg/Arg	*His		Arg/Arg	*His		*His vs. Arg/Arg	
Nowell (2004) ⁸⁵ USA	C (654) AA (199)	1996-2002	Healthy	59	47		46	47		0.78 (0.43-1.42)	

Lung											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Cote (2009) ³⁷ USA	C (791) AA (235)	2001-2005	Healthy	78	36		93	28		1.53 (0.83-2.85)	
Ford (2000) ⁸⁶ USA	AA (237)	1984-1996	Hospital	80	37		96	24		1.85 (0.98-3.51)	
Kelsey (1997) ⁸⁷ USA	AA (240) L (206)	N/A	Healthy	84	24		102	30		0.97 (0.50-1.87)	
London (1995a) ⁸⁸ USA	C (649) AA (409)	1990-1994	Healthy	114	44		183	68		1.04 (0.65-1.66)	
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Cote (2009) ³⁷ USA	C (794) AA (236)	2001-2005	Healthy	87	28		95	26		1.18 (0.61-2.26)	
Kelsey (1997) ⁸⁷ USA	AA (240) L (206)	N/A	Healthy	81	27		103	29		1.18 (0.62-2.25)	
<i>GSTP1 (I105V) rs947894</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	Val/Val vs. Ile/Ile	Ile/Val vs. Ile/Ile
Cote (2009) ³⁷ USA	C (792) AA (234)	2001-2005	Healthy	28	61	25	32	60	28	1.02 (0.46-2.28)	1.16 (0.60-2.27)
<i>CYP1A1 (mSpl) rs4646903</i>				wt/wt	wt/m2	m2/m2	wt/wt	wt/m2	m2/m2	m2/m2 vs. wt/wt	wt/m2 vs. wt/wt
Honma (2009)⁴⁴ Brazil	C (373) A (91)	2004-2006	Healthy	15	27^a	---	26	23^a	---	---	2.03 (0.81-5.18)^b
Cote (2009) ³⁷ USA	C (785) AA (230)	2001-2005	Healthy	65	39	7	82	34	3	2.94 (0.64-18.20)	1.45 (0.79-2.64)
Wrensch (2005) ⁸⁹ USA	AA (776) L (382)	1998-2002	Healthy	341	182	27	325	192	33	0.78 (0.44-1.37)	0.90 (0.70-1.17)
Taioli (1998) ⁴¹ USA	AA (387)	1984-1995	Healthy	59	30	9	170	101	18	1.44 (0.54-3.60)	0.86 (0.50-1.45)
Ishibe (1997) ³⁹ USA	AA (246) L (220)	N/A	Hospital	66	41	2	87	42	8	0.33 (0.03-1.77)	1.29 (0.73-2.28)
Shields (1993) ⁴⁰ USA	C (53) AA (51)	1985-1989	Hospital	18	9	1	14	7	2	0.39 (0.01-8.41)	1.00 (0.25-4.03)
Sugimura (1994) ⁴³ Brazil	NAD (178) A (44)	1991-1992	Hospital	12	7	3	14	6	2	1.75 (0.17-23.83)	1.36 (0.29-6.39)
<i>CYP1A1 (exon 7)</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Ishibe (1997) ³⁹ USA	AA (245) L (219)	N/A	Hospital	105	4	0	131	5	0	1.00 (0.19-4.76)	
Taioli (1998) ⁴¹ USA	AA (393)	1984-1995	Healthy	94	8	1	272	18	0	0.69 (0.28-1.81)	
<i>CYP1A1 (Ile/Val) rs1048943</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Cote (2009) ³⁷ USA	C (789) AA (236)	2001-2005	Healthy	105	10	0	117	4	0	2.79 (0.77-12.48)	
Wrensch (2005) ⁸⁹	AA (776)	1998-2002	Healthy	213	7	1	517	23	1	0.81 (0.31-1.90)	

USA	L (539)										
<i>CYP1A1 (African-American specific)</i>				wt/wt	wt/var	var/var	wt/wt	wt/var	var/var	*Var vs. wt/wt	
Kelsey (1994) ⁵⁰ USA	AA (169)	N/A	Healthy	60	11	1	74	21	2	0.64 (0.27-1.48)	
London (1995b) ⁵¹ USA	AA (374)	1990-1994	Healthy	120	23	1	195	35	0	1.11 (0.60-2.03)	
Taioli (1998) ⁴¹ USA	AA (402)	1984-1995	Healthy	86	16	1	256	42	1	1.18 (0.60-2.24)	
<i>CYP1B1 (V432L) rs1056836</i>				Val/Val	Leu/Val	Leu/Leu	Val/Val	Leu/Val	Leu/Leu	Leu/Leu vs. Val/Val	Leu/Val vs. Val/Val
Cote (2007) ⁹⁰ USA	C (577) AA (226)	1990-?	Healthy	60	33	7	64	53	9	0.83 (0.25-2.69)	0.66 (0.36-1.20)
<i>CYP2C9*2 rs1799853</i>				1/1	*2		1/1	*2		*2 vs. 1/1	
London (1996a) ⁹¹ USA	C (638) AA (391)	1990-1994	Healthy	143	9		222	17		0.82 (0.31-2.01)	
<i>CYP2D6 (inactivating alleles)^d</i>			wt/wt	wt/mut	mut/mut	wt/wt	wt/mut	mut/mut	mut/mut vs. wt/wt	wt/mut vs. wt/wt	
London (1997a) ⁹² USA	C (649) AA (404)	1991-1994	Healthy	130	24	4	180	58	8	0.69 (0.15-2.65)	0.57 (0.32-1.00)
<i>CYP2E1 (DraI) rs6413432</i>				D/D	D/C	C/C	D/D	D/C	C/C	*C vs. D/D	
Wu (1998) ⁹³ USA	AA (189) L (130)	N/A	Healthy	77	8	0	82	21	1	0.39 (0.14-0.97)	
<i>CYP2E1 (PstI/RsaI) rs2031920</i>				c1/c1	c1/c2	c2/c2	c1/c1	c1/c2	c2/c2	*c2 vs. c1/c1	
London (1996b) ⁹⁴ USA	C (643) AA (404)	1991-1994	Healthy	154	3	0	242	5	0	0.94 (0.14-4.92)	
Wu (1997) ⁹³ USA	AA (206) L (137)	N/A	Hospital	82	10	0	99	14	1	0.80 (0.31-2.03)	
<i>CYP17 (5'-UTR) rs743572</i>				T/T	T/C	C/C	T/T	T/C	C/C	C/C vs. T/T	T/C vs. T/T
Cote (2009) ³⁷ USA	C (794) AA (235)	2001-2005	Healthy	44	46	24	50	62	9	3.03 (1.19-8.17)	0.84 (0.47-1.53)
<i>mEPHX (exon 3) rs1051740</i>				Tyr/Tyr	Tyr/His	His/His	Tyr/Tyr	Tyr/His	His/His	His/His vs. Tyr/Tyr	Tyr/His vs. Tyr/Tyr
London (2000) ⁹⁵ USA	C (640) AA (397)	1990-1994	Healthy	106	48	1	153	77	12	0.12 (0.01-0.84)	0.90 (0.57-1.42)
Wu (2001) ⁹⁶ USA	AA (127) L (115)	1990-1994	Healthy	40	22	3	38	20	4	0.71 (0.10-4.53)	1.05 (0.46-2.37)
<i>mEPHX (exon 4) rs2234922</i>				His/His	His/Arg	Arg/Arg	His/His	His/Arg	Arg/Arg	Arg/Arg vs. His/His	His/Arg vs. His/His
London (2000) ⁹⁵ USA	C (640) AA (397)	1990-1994	Healthy	70	70	15	119	105	18	1.42 (0.62-3.18)	1.13 (0.73-1.77)
Wu (2001) ⁹⁶	AA (146)	1990-1994	Healthy	31	38	6	34	36	1	6.58 (0.72-311.35)	1.16 (0.56-2.38)

USA	L (129)										
<i>NQO1 (C609T) rs1800566</i>				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Bock (2005) ^{e97}	C (186)	1984-1987	Healthy	14	8 ^a	---	7	4 ^a	---	---	1.00 (0.18-6.18) ^b
USA	AA (33)										
Cote (2009) ³⁷	C (792)	2001-2005	Healthy	77	32	4	79	36	6	0.68 (0.14-3.02)	0.91 (0.49-1.68)
USA	AA (234)										
Saldivar (2005) ⁹⁸	C (1366)	N/A	Hospital	67	33	7	69	35	3	2.40 (0.52-14.91)	0.97 (0.52-1.81)
USA	AA (214)										
Wiencke (1997) ⁹⁹	L (72)										
USA	AA (252)	N/A	Healthy	77	39 ^a	---	83	53 ^a	---	---	0.79 (0.46-1.37) ^b
USA	L (222)										
<i>MPO (G463A) rs2333227</i>				G/G	G/A	A/A	G/G	G/A	A/A	A/A vs. G/G	G/A vs. G/G
London (1997b) ¹⁰⁰	C (641)	1990-1994	Healthy	71	74	12	121	100	23	0.89 (0.38-2.00)	1.26 (0.81-1.96)
USA	AA (401)										
<i>COMT (G1947A) rs4680</i>				G/G	G/A	A/A	G/G	G/A	A/A	A/A vs. G/G	G/A vs. G/G
Cote (2009) ³⁷	C (788)	2001-2005	Healthy	56	46	10	59	47	14	0.75 (0.28-2.00)	1.03 (0.58-1.85)
USA	AA (232)										
Liver											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
	A (443)	1997-2000	Healthy	105	44		218	76		1.20 (0.75-1.90)	
Kirk (2005) ¹⁰¹											
Gambia											
	A (306)	1996-1998	Healthy	65	47		121	73		1.20 (0.72-1.98)	
Tiemersma (2001) ¹⁰²											
Sudan											
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Kirk (2005) ¹⁰¹	A (443)	1997-2001	Healthy	79	70		162	132		1.09 (0.72-1.65)	
Gambia											
Tiemersma (2001) ¹⁰²	A (306)	1996-1998	Healthy	73	39		123	71		0.93 (0.55-1.55)	
Sudan											
<i>mEPHX (exon 3) rs1051740</i>				Tyr/Tyr	Tyr/His	His/His	Tyr/Tyr	Tyr/His	His/His	His/His vs. Tyr/Tyr	Tyr/His vs. Tyr/Tyr
Tiemersma (2001) ¹⁰²	A (303)	1996-1998	Healthy	68	28	14	128	50	15	1.76 (0.75-4.15)	1.05 (0.58-1.88)
Sudan											
<i>mEPHX (exon 4) rs2234922</i>				His/His	His/Arg	Arg/Arg	His/His	His/Arg	Arg/Arg	Arg/Arg vs. His/His	His/Arg vs. His/His
Tiemersma (2001) ¹⁰²	A (294)	1996-1998	Healthy	63	44	3	102	69	13	0.37 (0.07-1.44)	1.03 (0.61-1.74)
Sudan											
Bladder											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Bell (1993) ¹⁰³	C (412)	N/A	Hospital	8	8		8	4		2.00 (0.34-12.81)	
USA	AA (28)										

<i>NAT1*10</i> <i>rs1057126; rs15561</i>				non *10	*10		non *10	*10		*10 vs. non *10	
Taylor (1998) ^{104#} USA	C (406) AA (27)	N/A	Hospital	5	10		4	8		1.00 (0.15-6.55)	
Pancreas											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Duell (2002) ¹⁰⁵ USA	C (1114) As (69) AA (62)	1994-2001	Healthy	17	9		22	14		0.83 (0.25-2.67)	
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Duell (2002) ¹⁰⁵ USA	C (1113) As (69) AA (62)	1994-2001	Healthy	21	5		28	8		0.83 (0.19-3.40)	
<i>CYP1A1 (mSpl)</i> <i>rs4646903</i>				wt/wt	wt/m2	m2/m2	wt/wt	wt/m2	m2/m2	m2/m2 vs. wt/wt	wt/m2 vs. wt/wt
Duell (2002) ¹⁰⁵ USA	C (1110) As (70) AA (62)	1994-2001	Healthy	18	7	1	27	7	2	0.75 (0.01-15.51)	1.5 (0.37-5.95)
<i>CYP1A1 (Ile/Val)</i> <i>rs1048943</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Duell (2002) ¹⁰⁵ USA	C (1116) As (69) AA (62)	1994-2001	Healthy	25	1	0	36	0	0	---	
<i>CYP1A1 (Thr461Asn)</i> <i>rs1799814</i>				Thr/Thr	Thr/Asn	Asn/Asn	Thr/Thr	Thr/Asn	Asn/Asn	*Asn vs. Thr/Thr	
Duell (2002) ¹⁰⁵ USA	C (1117) As (70) AA (62)	1994-2001	Healthy	26	0	0	36	0	0	---	
<i>MTHFR (C677T)</i> <i>rs1801133</i>				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Li (2005) ¹⁰⁶ USA	C (610) L (34) AA (33)	2000-2004	Hospital	11	6	0	12	4	0	---	1.64 (0.29-10.03)
<i>MTHFR (A1298C)</i> <i>rs1801131</i>				A/A	A/C	C/C	A/A	A/C	C/C	C/C vs. A/A	A/C vs. A/C
Li (2005) ¹⁰⁶ USA	C (613) L (38) AA (33)	2000-2004	Hospital	12	5	0	9	6	1	---	0.63 (0.11-3.42)
Kidney											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Sweeney (2000) ¹⁰⁷ USA	C (610) As (9) AA (6) NA (5) O (5)	1996-1997	Healthy	1	3		1	1		3.00 (0.02-312.75)	

<i>GSTT1 (deletion)</i> Sweeney (2000) ¹⁰⁷ USA				Present 1	Null 3		Present 1	Null 1		Null vs. Present 3.00 (0.02-312.75)	
<i>GSTP1 (I105V)</i> <i>rs947894</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	Val/Val vs. Ile/Ile	Ile/Val vs. Ile/Ile
Sweeney (2000) ¹⁰⁷ USA				2	2 ^a	---	1	1 ^a	---	---	1.00 (0.01-117.33) ^b
Head & Neck											
<i>GSTM1 (deletion)</i> Olshan (2000) ¹⁰⁸ USA				Present 43	Null 20		Present 15	Null 10		Null vs. Present 0.70 (0.24-2.07)	
<i>GSTT1 (deletion)</i> Olshan (2000) ¹⁰⁸ USA				Present 49	Null 14		Present 20	Null 5		Null vs. Present 1.14 (0.33-4.60)	
<i>GSTP1 (I105V)</i> <i>rs947894</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	Val/Val vs. Ile/Ile	Ile/Val vs. Ile/Ile
Park (1999) ¹⁰⁹ USA				14	25	12	24	44	15	1.37 (0.44-4.20)	0.97 (0.40-2.43)
Olshan (2000) ¹⁰⁸ USA				18	38	7	7	13	5	0.54 (0.10-3.01)	1.14 (0.32-3.72)
<i>GSTP1 (A114V)</i> <i>rs1799811</i>				Ala/Ala	Ala/Val	Val/Val	Ala/Ala	Ala/Val	Val/Val	*Val vs. Ala/Ala	
Park (1999) ¹⁰⁹ USA				47	3	1	81	2	0	3.45 (0.47-39.08)	
<i>CYP1A1 (Ile/Val)</i> <i>rs1048943</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Olshan (2000) ¹⁰⁸ USA				61	2	0	24	0	0	---	
<i>CYP2E1 (PstI/RsaI)</i> <i>rs2031920</i>				c1/c1	c1/c2	c2/c2	c1/c1	c1/c2	c2/c2	*c2 vs. c1/c1	
Liu (2001) ¹¹⁰ USA				55	0	0	155	1	0	---	
<i>mEPHX (exon 3)</i> <i>rs1051740</i>				Tyr/Tyr	Tyr/His	His/His	Tyr/Tyr	Tyr/His	His/His	His/His vs. Tyr/Tyr	Tyr/His vs. Tyr/Tyr
Park (2003) ¹¹¹ USA				56	21	4	86	27	9	0.68 (0.15-2.60)	1.19 (0.58-2.43)
<i>mEPHX (exon 4)</i> <i>rs2234922</i>				His/His	His/Arg	Arg/Arg	His/His	His/Arg	Arg/Arg	Arg/Arg vs. His/His	His/Arg vs. His/His
Park (2003) ¹¹¹				31	41	9	60	50	12	1.45 (0.48-4.22)	1.59 (0.84-3.02)

USA	AA (203)										
<i>NAT1*10</i> <i>rs1057126; rs15561</i>				non *10	*10		non *10	*10		*10 vs. non *10	
Olshan (2000) ¹⁰⁸ USA	C (277) AA (88)	1994-1997	Hospital	19	43		9	16		1.27 (0.42-3.73)	
<i>ADH3*2 (I349V)</i> <i>rs698</i>				*1/*1	*1/*2	*2/*2	*1/*1	*1/*2	*2/*2	*2/*2 vs. *1/*1	*1/*2 vs. *1/*1
Olshan (2001) ¹¹² USA	C (274) AA (87)	1994-1997	Hospital	45	16	2	19	5	0	---	1.35 (0.39-5.38)
Colon											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Huang (2006) ¹¹³ USA	C (862) AA (566)	1996-2000	Healthy	162	77		245	82		1.42 (0.96-2.09)	
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Huang (2006) ¹¹³ USA	C (862) AA (570)	1996-2000	Healthy	187	56		218	109		0.60 (0.40-0.87)	
<i>NAT1*10</i> <i>rs1057126; rs15561</i>				non *10	*10		non *10	*10		*10 vs. non *10	
Butler (2008) ¹¹⁴ USA	C (810) AA (507)	1996-2000	Healthy	65	143		83	216		0.85 (0.56-1.27)	
<i>NAT2 (predicted phenotype)</i>			Slow	Int	Rapid	Slow	Int	Rapid	Rapid vs. Slow	Int vs. Slow	
Butler (2008) ¹¹⁴ USA	C (808) AA (522)	1996-2000	Healthy	83	100	32	120	138	49	0.94 (0.54-1.65)	1.05 (0.70-1.56)
<i>MTHFR (C677T)</i> <i>rs1801133</i>				C/C	C/T	T/T	C/C	C/T	T/T	T/T vs. C/C	C/T vs. C/C
Keku (2002) ¹¹⁵ USA	C (847) AA (573)	1996-2000	Healthy	198	43	3	264	59	6	0.67 (0.11-3.17)	0.97 (0.61-1.53)
<i>MTHFR (A1298C)</i> <i>rs1801131</i>				A/A	A/C	C/C	A/A	A/C	C/C	C/C vs. A/A	A/C vs. A/C
Keku (2002) ¹¹⁵ USA	C (850) AA (572)	1996-2000	Healthy	157	78	8	217	99	13	0.85 (0.30-2.28)	1.09 (0.75-1.59)
Brain											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Wrensch (2004) ⁸⁹ USA	C (822) L (50) As (46) AA (31) O (14)	1991-2000	Healthy	12	5		9	5		0.75 (0.13-4.43)	
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Wrensch (2004) ⁸⁹ USA	C (822) L (50) As (46) AA (31) O (14)	1991-2000	Healthy	13	4		11	3		1.13 (0.15-9.40)	

<i>GSTP1 (A114V)</i> <i>rs1799811</i>				Ala/Ala	Ala/Val	Val/Val	Ala/Ala	Ala/Val	Val/Val	*Val vs. Ala/Ala	
Wrench (2004) ⁸⁹ USA	C (822) L (50) As (46) AA (31) O (14)	1991-2000	Healthy	15	2 ^a	---	14	0 ^a	---	---	
Ovarian											
<i>CYP1A1 (mspl)</i> <i>rs4646903</i>				wt/wt	wt/m2	m2/m2	wt/wt	wt/m2	m2/m2	m2/m2 vs. wt/wt	wt/m2 vs. wt/wt
Holt (2007) ¹¹⁶ USA	C (726) AA (157)	1994-1998	Healthy	20	9	4	73	45	6	2.43 (0.45-11.33)	0.73 (0.27-1.86)
<i>CYP1A1 (Ile/Val)</i> <i>rs1048943</i>				Ile/Ile	Ile/Val	Val/Val	Ile/Ile	Ile/Val	Val/Val	*Val vs. Ile/Ile	
Holt (2007) ¹¹⁶ USA	C (724) AA (159)	1994-1998	Healthy	33	0	0	123	3	0	0.00 (0.00-4.95)	
Sellers (2005) ¹¹⁷ USA	C (998) AA (89)	1999-?	Healthy/ Hospital	33	3 ^a	---	50	3 ^a	---	1.52 (0.19-11.95)	
<i>CYP1A1 (Thr461Asn)</i> <i>rs1799814</i>				Thr/Thr	Thr/Asn	Asn/Asn	Thr/Thr	Thr/Asn	Asn/Asn	*Asn vs. Thr/Thr	
Holt (2007) ¹¹⁶ USA	C (724) AA (159)	1994-1998	Healthy	31	2	0	124	2	0	4.00 (0.28-56.54)	
<i>CYP1A1 (African-American specific)</i>				wt/wt	wt/var	var/var	wt/wt	wt/var	var/var	*var vs. wt/wt	
Holt (2007) ¹¹⁶ USA	C (725) AA (159)	1994-1998	Healthy	29	3	1	105	21	0	0.69 (0.16-2.28)	
<i>CYP1B1 (V432L)</i> <i>rs1056836</i>				Val/Val	Leu/Val	Leu/Leu	Val/Val	Leu/Val	Leu/Leu	Leu/Leu vs. Val/Val	Leu/Val vs. Val/Val
Holt (2007) ¹¹⁶ USA	C (724) AA (160)	1994-1998	Healthy	18	11	4	80	39	8	2.22 (0.44-9.38)	1.25 (0.48-3.13)
<i>CYP1B1 (A119S)</i> <i>rs1056827</i>				Ala/Ala	Ala/Ser	Ser/Ser	Ala/Ala	Ala/Ser	Ser/Ser	Ser/Ser vs. Ala/Ala	Ala/Ser vs. Ala/Ala
Holt (2007) ¹¹⁶ USA	C (727) AA (159)	1994-1998	Healthy	12	15	6	49	50	27	0.91 (0.25-2.98)	1.23 (0.48-3.18)
Sellers (2005) ¹¹⁷ USA	C (996) AA (89)	1999-?	Healthy/ Hospital	6	30 ^a	---	16	37 ^a	---	---	2.16 (0.69-7.55) ^b
<i>CYP1B1 (N453S)</i> <i>rs1800440</i>				Asn/Asn	Asn/Ser	Ser/Ser	Asn/Asn	Asn/Ser	Ser/Ser	*Ser vs. Asn/Asn	
Holt (2007) ¹¹⁶ USA	C (727) AA (160)	1994-1998	Healthy	28	5	0	117	9	1	2.09 (0.52-7.34)	
<i>CYP1B1 (R48G)</i> <i>rs10012</i>				C/C	C/G	G/G	C/C	C/G	G/G	G/G vs. C/C	C/G vs. C/C
Holt (2007) ¹¹⁶ USA	C (726) AA (159)	1994-1998	Healthy	9	18	6	45	46	35	0.86 (0.23-3.00)	1.96 (0.74-5.47)
Sellers (2005) ¹¹⁷	C (996)	1999-?	Healthy/	6	30 ^a	---	12	41 ^a	---	---	1.46 (0.44-5.29) ^b

USA	AA (89)		Hospital								
<i>SULT1A1 (R213H)</i> <i>rs9282861</i>				Arg/Arg	*His		Arg/Arg	*His		*His vs. Arg/Arg	
Holt (2007) ¹¹⁶	C (725)	1994-1998	Healthy	21	12		67	60		0.64 (0.26-1.50)	
USA	AA (160)										
Sellers (2005) ¹¹⁷	C (996)	1999-?	Healthy/	15	21		25	28		1.25 (0.49-3.22)	
USA	AA (89)		Hospital								
<i>COMT (G1947A)</i> <i>rs4680</i>				G/G	G/A	A/A	G/G	G/A	A/A	A/A vs. G/G	G/A vs. G/G
Holt (2007) ¹¹⁶	C (727)	1994-1998	Healthy	19	10	4	52	58	16	0.68 (0.15-2.51)	0.47 (0.18-1.19)
USA	AA (159)										
Sellers (2005) ¹¹⁷	C (996)	1999-?	Healthy/	19	17 ^a	---	23	30 ^a	---	---	0.69 (0.27-1.75) ^b
USA	AA (89)		Hospital								
Leukemia											
<i>GSTM1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Chen (1997) ¹¹⁸	C (376)	1985-1995	Healthy	20	14		147	56		1.84 (0.80-4.12)	
USA	AA (237)										
<i>GSTT1 (deletion)</i>				Present	Null		Present	Null		Null vs. Present	
Chen (1997) ¹¹⁸	C (376)	1985-1995	Healthy	22	12		154	49		1.71 (0.72-3.92)	
USA	AA (237)										
Esophagus											
<i>CYP3A5^c</i>				wt/wt	wt/mut	mut/mut	wt/wt	wt/mut	mut/mut	mut/mut vs. wt/wt	wt/mut vs. wt/wt
Dandara (2005) ¹¹⁹	A (320)	N/A	Hospital	55	67	20	82	63	33	0.90 (0.44-1.82)	1.59 (0.95-2.65)
South Africa	MA (193)										
<i>SULT1A1 (R213H)</i> <i>rs9282861</i>				Arg/Arg	*His		Arg/Arg	*His		*His vs. Arg/Arg	
Dandara (2006) ¹²⁰	A (314)	1997-2003	Healthy	67	75		80	92		0.97 (0.61-1.56)	
South Africa	MA (188)										
<i>ADH2*2 (R48H)</i> <i>rs1229984</i>				*1/*1	*1/*2	*2/*2	*1/*1	*1/*2	*2/*2	*2 vs. *1/*1	
Li (2008) ³⁸	A (282)	1997-2003	Healthy	125	4	0	151	2	0	2.42 (0.34-27.04)	
South Africa	MA (190)										
<i>ADH2*3 (R370C)</i> <i>rs2066702</i>				*1/*1	*1/*3	*3/*3	*1/*1	*1/*3	*3/*3	*3 vs. *1/*1	
Li (2008) ³⁸	A (309)	1997-2003	Healthy	125	11	1	151	21	0	0.69 (0.30-1.54)	
South Africa	MA (190)										
Li (2008) ³⁸	A (315)	1997-2003	Healthy	59	35	47	99	39	36	2.19 (1.23-3.90)	1.51 (0.83-2.73)
South Africa	MA (190)										
<i>ALDH2*2 (Q487K)</i> <i>rs671</i>											
Li (2008) ³⁸	A (315)	1997-2003	Healthy	121	13	7	160	13	1	9.26 (1.16-419.64)	1.32 (0.54-3.22)
South Africa	MA (190)										

Abbreviations: A = African descent; AA = African-American; As = East Asian; C = Caucasian; L = Latino; MA = Mixed ancestry;

NA = Native American; NAD = not of African descent; O = other; PI = Pacific Islander

Nested case-control study

^a Combines homozygous and heterozygous variant genotypes

^b Variant carriers vs. homozygous wild-type genotypes

^c Mut represents carriers of at least 1 of the following CYP3A5 variant alleles: *3, *6 or *7

^d Inactivating alleles include: CYP2D6*3, *4, *5 or *16

^e Only includes those diagnosed $\geq$ 50 years old due to overlap with Cote 2009

[^] results shown separately for African-Americans and Africans respectively

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