

Supplementary Table 5. Results of previous meta-analyses between XRCC1 polymorphisms and BC risk.

First author/year	Variable	n (Cases/Controls)	XRCC1 Arg399Gln polymorphism									
			Gln vs. Arg		Arg/Gln vs. Arg/Arg		Gln/Gln vs. Arg/Arg		Arg/Gln + Gln/Gln vs. Arg/Arg			
			OR (95% CI)	P _{adj} I ² (%)	OR (95% CI)	P _{adj} I ² (%)	OR (95% CI)	P _{adj} I ² (%)	OR (95% CI)	P _{adj} I ² (%)		
Qiu J et al. 2020	Overall	16 (11075/12241)	–	–	–	–	1.04(0.95, 1.13)	0.704/0.0	–	1.01 (0.93, 1.09)	0.588/0.0	
	Asian	5	–	–	–	–	1.32(1.04, 1.69)	0.611/0.0	–	1.30 (1.03, 1.65)	0.436/0.0	
	Caucasian	11	–	–	–	–	1.00(0.91, 1.10)	0.908/0.0	–	0.97 (0.89, 1.06)	0.928/0.0	
Chen XP et al. 2017	Overall (Chinese)	10 (4732/5677)	1.11 (0.98, 1.25)	0.000/71.4	1.07 (0.89, 1.27)	0.000	1.35 (1.00, 1.77)	0.000	1.11 (0.93, 1.32)	0.000	1.26 (1.00, 1.60)	0.010
	In HWE	54	1.12 (0.97, 1.30)	0.000	1.07 (0.89, 1.27)	0.000	1.36 (0.97, 1.90)	0.000	1.14 (0.93, 1.40)	0.000	1.26 (0.96, 1.67)	0.006
	Ca	59	1.12 (0.97, 1.30)	0.000	1.07 (0.89, 1.27)	0.000	1.36 (0.97, 1.90)	0.000	1.14 (0.93, 1.40)	0.000	1.26 (0.96, 1.67)	0.006
Sanjari M A et al. 2016	Caucasian	14	–	–	1.06 (0.98, 1.10)	0.58.3	1.21 (1.10, 1.34)	0.000/49.8	1.09 (1.02, 1.15)	0.000/41.9	1.21 (1.09, 1.35)	0.000/59.2
	African-American	2	–	–	1.10 (0.86, 1.41)	0.96/0	1.82 (0.85, 3.88)	0.91/0	1.20 (0.89, 1.61)	0.97/0	1.76 (0.78, 3.55)	0.67/0
	White	2	–	–	1.09 (0.96, 1.24)	0.89/0	0.99 (0.82, 1.19)	0.87/0	1.08 (0.95, 1.22)	0.77/0	0.87 (0.73, 1.03)	0.77/0
	Han Chinese	5	–	–	0.91 (0.82, 1.01)	0.14/42.2	1.40 (0.93, 2.11)	0.76/6	1.02 (0.86, 1.21)	0.03/63.2	1.40 (0.89, 2.20)	0.80/9
	Greek Cypriot	1	–	–	–	–	–	–	–	–	–	–
	Persian Muslim	1	–	–	–	–	–	–	–	–	–	–
	Mix	4	–	–	–	–	–	–	–	–	–	–
	U	25	–	–	1.06 (0.90, 1.24)	0.95/0	1.09 (0.86, 1.38)	0.76/0	1.03 (0.91, 1.16)	0.98/0	1.06 (0.86, 1.31)	0.97/0
	Overall	13 (4984/5744)	–	–	1.08 (0.96, 1.22)	0.01/46.1	1.25 (1.03, 1.52)	0.049.7	1.15 (1.03, 1.30)	0.51.5	1.25 (1.04, 1.50)	0.52.3
	Chinese	7 (3250/4083)	–	–	–	–	1.59 (1.25, 2.00)	<0.0001/59	0.76 (0.63, 0.93)	0.006/57	1.59 (1.23, 2.00)	0.0002/65
Guo S et al. 2015	Overall	24 (15131/17179)	–	–	–	–	1.32 (0.97, 1.79)	0.07/65	1.30 (0.96, 1.75)	0.09/68	0.82 (0.59, 1.15)	0.25/73
	Caucasian	15	–	–	–	–	1.01(0.94, 1.09)	0.16/22.8	1.02(0.95, 1.09)	0.01/44.3	1.01 (0.95, 1.08)	0.32/9.9
	Asian	9	–	–	–	–	0.96(0.88, 1.04)	0.74/0.0	1.02(0.95, 1.09)	0.20/23.3	0.97 (0.90, 1.04)	0.88/0.0
Li LL et al. 2015	Overall	18 (10846/11723)	–	–	–	–	1.20(1.03, 1.39)	0.10/40	1.05(0.90, 1.22)	0.03/65.2	1.20(1.04, 1.38)	0.21/26.2
	Caucasian	5	–	–	–	–	–	–	–	–	–	–
	African-American	3	–	–	–	–	–	–	–	–	–	–
Bu T et al. 2014	Mixed	10	–	–	–	–	–	–	–	–	–	–
	Overall	54 (29,549/32,619)	–	–	–	–	1.10 (1.01, 1.20)	<0.001/49.1	1.05 (0.99, 1.10)	<0.001/46.8	1.09 (1.00, 1.18)	<0.001/50.6
	Asian	9 (4,804/5,522)	–	–	–	–	1.18 (1.02, 1.37)	0.269/19.5	1.00 (0.93, 1.08)	0.225/24.6	1.20 (1.04, 1.39)	0.339/11.5
Yi L et al. 2013	Caucasian	27 (18,056/18,909)	–	–	–	–	0.99 (0.92, 1.05)	0.182/19.6	0.99 (0.94, 1.05)	0.036/35.6	0.98 (0.92, 1.04)	0.315/10.1
	African	4 (1,166/1,116)	–	–	–	–	1.81 (1.08, 3.02)	0.988/0.0	1.28 (1.07, 1.54)	0.348/9.1	1.59 (0.96, 2.64)	0.918/0.0
	Indian	3 (632/715)	–	–	–	–	2.06 (1.10, 3.84)	0.230/31.9	1.64 (1.31, 2.04)	0.461/0.0	1.94 (1.09, 3.47)	0.037/69.8
Li JG et al. 2013	Mixed	11 (4,891/6,357)	–	–	–	–	1.07 (0.83, 1.36)	<0.001/68.6	1.10 (0.98, 1.23)	0.074/41.2	1.00 (0.78, 1.29)	<0.001/73.5
	Overall	36 (19796/24935)	–	–	–	–	1.08 (0.98, 1.18)	<0.001/49.1	1.00 (0.94, 1.07)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
	Caucasian	26	–	–	–	–	1.00 (0.94, 1.06)	<0.001/49.1	1.00 (0.94, 1.07)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
Li JG et al. 2013	Asian	7	–	–	–	–	1.00 (0.87, 1.15)	<0.001/49.1	1.00 (0.87, 1.15)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
	African	1	–	–	–	–	1.08 (0.75, 1.56)	<0.001/49.1	1.08 (0.75, 1.56)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
	American-Caucasian	12	–	–	–	–	1.01 (0.95, 1.07)	<0.001/49.1	1.01 (0.95, 1.07)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
Wu K et al. 2011	Pooled-Caucasian	2	–	–	–	–	1.12 (0.99, 1.26)	<0.001/49.1	1.12 (0.99, 1.26)	<0.001/46.8	1.05 (0.96, 1.16)	<0.001/50.6
	Overall	44 (20841/22688)	–	–	–	–	1.15 (1.04, 1.27)	<0.001/48	1.04 (0.98, 1.10)	0.001/44	1.15 (1.05, 1.27)	<0.001/51
	Asian	10	–	–	–	–	1.50 (1.15, 1.97)	0.01/58	1.08 (0.93, 1.25)	0.01/57	1.54 (1.18, 2.01)	0.008/60
Rui R et al. 2011	African	4	–	–	–	–	1.80 (1.08, 3.02)	0.99/0	1.30 (1.07, 1.60)	0.35/9	1.59 (0.96, 2.63)	0.92/0
	Caucasian	30	–	–	–	–	1.05 (0.95, 1.16)	0.02/37	1.01 (0.95, 1.07)	0.02/37	1.05 (0.96, 1.15)	0.02/39
	Overall	44 (24852/27400)	–	–	–	–	1.00 (0.96, 1.05)	0.09/22.7	1.02 (0.98, 1.07)	0.001/44.9	1.02 (0.98, 1.07)	0.000/47.6
Saadat M et al. 2009	Overall	36 (20837/22879)	–	–	–	–	1.01 (0.97, 1.05)	0.009/22.7	1.02 (0.98, 1.06)	0.001/44.9	1.02 (0.98, 1.07)	0.000/47.6
	Western countries (Caucasians)	14	–	–	–	–	1.02 (0.96, 1.08)	0.88 (0.88, 1.07)	1.01 (0.95, 1.06)	0.99/91.0	1.00 (0.91, 1.08)	–
	Asian countries	7	–	–	–	–	0.98 (0.88, 1.10)	–	1.05 (0.95, 1.18)	–	1.49 (1.22, 1.81)	–
Li H et al. 2009	Asian countries (women)	6	–	–	–	–	0.98 (0.87, 1.10)	–	1.05 (0.94, 1.17)	–	1.49 (1.21, 1.81)	–
	Caucasians of Asian countries	2	–	–	–	–	0.84 (0.61, 1.16)	–	1.69 (1.03, 2.73)	–	1.83 (1.16, 2.87)	–
	Overall	40 (21467/22766)	–	–	–	–	–	–	–	–	–	–
Huang Y et al. 2009	Caucasian	28	–	–	–	–	–	–	–	–	–	–
	Asian	8	–	–	–	–	–	–	–	–	–	–
	Far-east Asian	4	–	–	–	–	–	–	–	–	–	–
Feng YZ et al. 2009	Overall	37 (23481/23905)	–	–	–	–	1.00 (0.91, 1.08)	–	1.02 (0.94, 1.12)	–	1.14 (1.03, 1.26)	–
	All of studies after excluding Studies not in HWE	32	–	–	–	–	1.13 (1.03, 1.25)	–	1.06 (1.00, 1.13)	–	1.12 (1.02, 1.23)	–
	Caucasian	15	–	–	–	–	1.04 (0.98, 1.10)	–	1.01 (0.95, 1.07)	–	1.06 (0.94, 1.19)	–
Huang Y et al. 2009	All of Caucasian studies excluding Studies not in HWE	14	–	–	–	–	1.01 (0.95, 1.07)	–	1.02 (0.93, 1.11)	–	1.06 (0.94, 1.19)	–
	Asian	7	–	–	–	–	1.00 (0.94, 1.07)	–	1.03 (0.94, 1.12)	–	1.08 (0.95, 1.22)	–
	All of Asian studies excluding Studies not in HWE	3	–	–	–	–	0.98 (0.88, 1.09)	–	1.40 (1.16, 1.70)	–	1.50 (1.14, 1.97)	–
Zhang Y et al. 2006	African	4	–	–	–	–	1.06 (0.91, 1.22)	–	1.26 (0.96, 1.62)	–	1.26 (0.96, 1.64)	–
	Overall	14 (10934/11543)	–	–	–	–	1.20 (0.99, 1.46)	–	1.89 (1.02, 3.49)	–	1.24 (1.03, 1.51)	–
	Caucasian	8 (7824/8226)	–	–	–	–	1.10 (1.00, 1.10)	0.13	1.10 (1.00, 1.20)	0.24	–	–
Sanjari M A et al. 2016	Asian	4 (1567/1643)	–	–	–	–	1.10 (1.00, 1.10)	0.13	1.00 (0.90, 1.10)	0.81	–	–
	Overall	31 (14,381/15,036)	–	–	–	–	1.00 (0.80, 1.40)	0.85	1.60 (1.10, 2.30)	0.02	–	–
	Overall	31 (14,381/15,036)	–	–	–	–	1.08 (0.96, 1.22)	0.58.5	1.05 (0.89, 1.24)	0.38/6	1.03 (0.88, 1.21)	0.8/0
Sanjari M A et al. 2016	Caucasian	8	–	–	–	–	1.10 (0.81, 1.50)	0.66/3	1.00 (0.28, 2.53)	0.15/2.4	1.06 (0.77, 1.45)	0.69/1
	African-American	2	–	–	–	–	0.96 (0.71, 1.30)	0.23/29.4	–	–	0.99 (0.73, 1.34)	0.76/0
	White	1	–	–	–	–	–	–	–	–	–	–
	Han Chinese	2	–	–	–	–	1.06 (0.84, 1.35)	0.11/60.3	1.09 (0.85, 1.40)	0.55/0	1.07 (0.85, 1.35)	0.11/63.1
	Greek Cypriot	1	–	–	–	–	–	–	–	–	–	–
	Mix	4	–	–	–	–	–	–	–	–	–	–
	U	14	–	–	–	–	1.22 (0.96, 1.55)	0.61/7	1.07 (0.84, 1.36)	0.22/6	1.24 (1.00, 1.55)	0.62/3
	Overall	30 (13,914/14,793)	–	–	–	–	0.99 (0.91, 1.08)	0.027/36.6	1.06 (0.91, 1.23)	0.622/0.0	1.00 (0.92, 1.10)	0.007/43.2
	Asian	6 (2,860/3,211)	–	–	–	–	1.08 (0.97, 1.20)	0.524/0.0	1.09 (0.92, 1.31)	0.385/5.0	1.08 (0.98, 1.20)	0.527/0.0
	Caucasian	13 (5,984/6,084)	–	–	–	–	1.01 (0.91, 1.12)	0.393/5.4	0.92 (0.62, 1.35)	0.497/0.0	1.01 (0.91, 1.12)	0.224/21.7
	African	3 (982/917)	–	–	–	–	0.95 (0.72, 1.25)	0.433/0.0	1.24 (0.34, 4.56)	0.476/0.0	0.95 (0.73, 1.25)	0.605/0.0
Feng YZ et al. 2014	Overall	18 (9,975/10,712)	–	–	–	–	0.99 (0.92, 1.06)	<0.001/49.1	1.02 (0.98, 1.07)	0.001/44.9	1.02 (0.98, 1.07)	0.000/47.6
	Caucasian	12	–	–	–	–	1.05 (0.95, 1.16)	<0.001/49.1	1.03 (0.96, 1.10)	0.009/22.7	1.02 (0.98, 1.07)	0.000/47.6
	Asian	7	–	–	–	–	1.00 (0.87, 1.15)	<0.001/49.1	1.17 (0.94, 1.47)	<0.001/49.1	1.04 (0.91, 1.19)	<0.001/49.1
Li JG et al. 2013	Overall	21 (10,465/10,888)	–	–	–	–	–	–	–	–	–	–
	Caucasian	14	–	–	–	–	–	–	–	–	–	–
	Asian	5	–	–	–	–	–	–	–	–	–	–
Li H et al. 2009	Far-east Asian	2	–	–	–	–	–	–	–	–	–	–
	Overall	18 (9,419/7,831)	–	–	–	–	1.01 (0.93, 1.09)	–	0.94 (0.74, 1.20)	–	1.00 (0.93, 1.09)	–
	All of studies after excluding Studies not in HWE	17	–	–	–	–	1.02 (0.93, 1.11)	–	0.99 (0.77, 1.26)	–	1.02 (0.93, 1.1	