Supplementary Table 7. Characteristics of the included studies of XRCC1 polymorphisms in BC risk stratified by menopausal status. (HB, hospital-based study; PB, population-based study; BV, blood volunteers; FB, family-based study; NR, not reported.)

No.	First Author/Year	Country	Geographic region	Ethnicity	Sample size (case/control)	Menopausal status (Pre/Post)	Genotypes distribution of XRCC1 Arg399Gln						Adjusted OR and 95% CI				HWE	Quality score
							Cases			Controls			Arg/Gln vs Arg/Arg	Gln/Gln vs. Arg/Arg	Gln/Gln + Arg/Gln vs. Arg/Arg	Gln/Gln vs. Arg/Arg + Arg/Gln		
							Arg/Ar	Arg/Gln	Gln/Gln	Arg/Ar	Arg/Gln	Gln/Gln						
1	Kang et al. 2003	Korea	Asia	Asian	124/115	Pre	52	52	20	60	49	6	1.20 (0.72, 2.10)	3.80 (1.44, 10.30)	–	–	0.3175	11
2	Kang et al. 2003	Korea	Asia	Asian	81/85	Post	40	27	14	28	50	7	0.40 (0.19, 0.74)	1.40 (0.50, 3.91)	–	–	0.0197	11
3	Shu et al. 2003	China	Asia	Asian	729/758	Pre	373	295	61	368	340	50	0.79 (0.63, 0.98)	1.20 (0.79, 1.81)	–	–	0.0146	17
4	Shu et al. 2003	China	Asia	Asian	359/424	Post	188	147	24	242	158	24	1.21 (0.90, 1.64)	1.19 (0.65, 2.17)	–	–	0.7874	17
5	Chacko et al. 2005	India	Asia	Indian	63/63	Pre	20	43		47	16		–	–	6.32 (2.90, 13.73)	–	–	11
6	Chacko et al. 2005	India	Asia	Indian	60/60	Post	36	24		32	28		–	–	0.46 (0.36, 1.57)	–	–	11
7	Patel et al. 2005	USA	North America	Mixed	452/452	Post	196	195	61	194	202	56	1.01 (0.73, 1.39)	1.27 (0.79, 2.02)	1.06 (0.78, 1.44)	–	0.7609	17
8	Shen et al. 2005	USA	North America	Mixed	341/376	Pre	131	174	36	162	169	45	1.28 (0.93, 1.75)	1.03 (0.62, 1.70)	1.23 (0.91, 1.66)	–	0.9275	18
9	Shen et al. 2005	USA	North America	Mixed	701/688	Post	274	347	80	267	342	79	0.99 (0.79, 1.24)	1.01 (0.71, 1.44)	0.99 (0.80, 1.24)	–	0.0510	18
10	Zhai et al. 2006	China	Asia	Asian	206/218	Pre	118	88		121	97		–	–	–	–	–	15
11	Zhai et al. 2006	China	Asia	Asian	250/269	Post	141	109		145	124		–	–	–	–	–	15
12	Zhang et al. 2006	USA	North America	Caucasian	1188/880	Pre	475	564	149	336	418	126	1.00 (0.80, 1.20)	0.80 (0.60, 1.10)	–	–	0.8270	15
13	Zhang et al. 2006	USA	North America	Caucasian	1634/1537	Post	655	760	219	651	680	206	1.10 (0.90, 1.30)	1.10 (0.80, 1.30)	–	–	0.1800	15
14	Zhang et al. 2006	Poland	Europe	Caucasian	490/652	Pre	191	236	63	273	289	90	1.20 (0.90, 1.50)	1.00 (0.70, 1.50)	–	–	0.3359	17
15	Zhang et al. 2006	Poland	Europe	Caucasian	1390/1539	Post	546	650	194	633	693	213	1.10 (0.90, 1.30)	1.10 (0.80, 1.30)	–	–	0.2905	17
16	Saadat et al. 2008	Iran	Asia	Caucasian	87/112	Pre	40	30	17	53	47	12	0.88 (0.46, 1.67)	1.93 (0.81, 4.62)	1.09 (0.61, 1.96)	2.05 (0.90, 4.67)	0.7441	14
17	Saadat et al. 2008	Iran	Asia	Caucasian	41/36	Post	21	15	5	13	20	3	0.48 (0.18, 1.31)	1.20 (0.23, 6.07)	0.57 (0.22, 1.48)	1.76 (0.38, 8.19)	0.2209	14
18	Sangrajrang et al. 2008	Thailand	Asia	Asian	268/244	Pre	150	101	17	142	92	10	1.05 (0.71, 1.55)	1.45 (0.60, 3.52)	–	–	0.3018	13
19	Sangrajrang et al. 2008	Thailand	Asia	Asian	239/180	Post	118	100	21	104	66	10	1.30 (0.84, 2.00)	1.84 (0.79, 4.28)	–	–	0.9111	13
20	Sobczuk et al. 2009	Poland	Europe	Caucasian	150/106	Post	34	68	48	24	44	38	–	–	–	–	0.1104	10
21	Qian et al. 2010	China	Asia	Asian	287/362	Pre	–	–	–	–	–	–	1.03 (0.69, 1.53)	0.79 (0.37, 1.65)	–	–	–	16
22	Qian et al. 2010	China	Asia	Asian	407/436	Post	–	–	–	–	–	–	0.96 (0.67, 1.39)	1.00 (0.56, 1.79)	–	–	–	16
23	Roberts et al. 2011	USA	North America	Mixed	268/506	Pre	126	120	22	227	228	51	0.88 (0.62, 1.24)	0.79 (0.44, 1.42)	0.86 (0.62, 1.20)	–	0.5705	15
24	Roberts et al. 2011	USA	North America	Mixed	714/1264	Post	291	341	82	587	544	133	1.22 (0.99, 1.51)	1.31 (0.94, 1.83)	1.24 (1.01, 1.51)	–	0.6762	15
25	Luo et al. 2014	China	Asia	Asian	61/99	Pre	27	27	7	53	38	8	1.53 (0.67, 3.52)	0.77 (0.20, 2.91)	1.33 (0.61, 2.92)	–	0.7471	13
26	Luo et al. 2014	China	Asia	Asian	133/146	Post	56	63	14	84	53	9	1.85 (1.08, 3.15)	2.58 (0.96, 6.90)	1.95 (1.17, 3.25)	–	0.8685	13
27	Özgöz et al. 2019	Turkey	Asia	Caucasian	102/100	Post	51	46	5	38	50	12	0.48 (0.14, 1.56)	0.16 (0.02, 1.06)	1.63 (0.93, 2.85)	–	0.4684	9

No.	First Author/Year	Country	Geographic region	Ethnicity	Sample size (case/control)	Menopausal status (Pre/Post)	Genotypes distribution of XRCC1 Arg194Trp (rs1799782						Adjusted OR and 95% CI				HWE	Quality score
							Cases			Controls			Arg/Trp vs Arg/Arg	Trp/Trp vs. Arg/Arg	Trp/Trp + Arg/Trp vs. Arg/Arg	Trp/Trp vs. Arg/Arg + Arg/Trp		
							Arg/Arg	Arg/Trp	Trp/Trp	Arg/Arg	Arg/Trp	Trp/Trp						
1	Kang et al. 2003	Korea	Asia	Asian	124/115	Pre	54	54	16	57	45	13	1.30 (0.74, 2.18)	1.30 (0.57, 2.95)	–	–	0.3724	11
2	Kang et al. 2003	Korea	Asia	Asian	81/85	Post	34	40	7	32	39	14	1.00 (0.50, 1.86)	0.50 (0.17, 1.32)	–	–	0.7173	11
3	Chacko et al. 2005	India	Asia	Indian	113/63	Pre	99	14		52	11		–	–	1.35 (0.55, 3.25)	–	–	11
4	Chacko et al. 2005	India	Asia	Indian	60/60	Post	30	30		44	16		–	–	2.75 (1.28, 5.90)	–	–	11
5	Patel et al. 2005	USA	North America	Mixed	485/485	Post	437	48		415	70		–	–	0.62 (0.40, 0.95)	–	Y	17
6	Shen et al. 2005	USA	North America	Mixed	341/376	Pre	300	41		321	55		–	–	0.78 (0.50, 1.20)	–	Y	18
7	Shen et al. 2005	USA	North America	Mixed	700/686	Post	616	84		605	81		–	–	1.00 (0.72, 1.38)	–	Y	18
8	Zhai et al. 2006	China	Asia	Asian	206/218	Pre	95	111		102	116		–	–	–	–	–	17
9	Zhai et al. 2006	China	Asia	Asian	250/269	Post	130	120		142	127		–	–	–	–	–	17
10	Zhang et al. 2006	USA	North America	Caucasian	607/448	Pre	526	80	1	397	50	1	1.20 (0.80, 1.80)	0.60 (0.00, 10.30)	–	–	0.6601	13
11	Zhang et al. 2006	USA	North America	Caucasian	869/710	Post	769	94	6	606	94	10	0.80 (0.60, 1.00)	0.50 (0.20, 1.40)	–	–	0.0058	13
12	Sangrajrang et al. 2008	Thailand	Asia	Asian	268/245	Pre	124	121	23	122	100	23	1.23 (0.83, 1.82)	0.88 (0.45, 1.73)	–	–	0.7029	13
13	Sangrajrang et al. 2008	Thailand	Asia	Asian	238/180	Post	115	107	16	80	79	21	0.92 (0.60, 1.42)	0.55 (0.26, 1.16)	–	–	0.8241	13
14	Sobczuk et al. 2009	Poland	Europe	Caucasian	150/106	Post	36	70	44	20	52	34					0.9881	10
15	Qian et al. 2010	China	Asia	Asian	287/362	Pre	–	–	–	–	–	–	0.76 (0.51, 1.14)	0.69 (0.31, 1.51)	–	–	–	16
16	Qian et al. 2010	China	Asia	Asian	407/436	Post	–	–	–	–	–	–	0.89 (0.63, 1.27)	0.61 (0.33, 1.14)	–	–	–	16
17	Devi et al. 2017	India	Asia	Indian	237/366	Pre	136	84	17	234	108	24	1.56 (1.03, 2.35)	2.48 (1.08, 5.69)	1.66 (1.11, 2.46)	2.02 (0.90, 4.54)	0.0215	14
18	Devi et al. 2017	India	Asia	Indian	217/118	Post	121	90	6	77	39	2	1.32 (0.74, 2.35)	2.21 (0.29, 16.8)	1.35 (0.76, 2.38)	1.94 (0.26, 14.50)	0.2362	14
19	Özgöz et al. 2019	Turkey	Asia	Caucasian	102/100	Post	83	16	3	81	17	2	0.40 (0.10, 1.64)	0.27 (0.00, 14.18)	1.02 (0.50, 2.07)	–	0.3396	9

No.	First Author/Year	Country	Geographic region	Ethnicity	Sample size (case/control)	Menopausal status (Pre/Post)	Genotypes distribution of XRCC1 Arg280His						Adjusted OR and 95% CI				HWE	Quality score
							Cases			Controls			Arg/His vs Arg/Arg	His/His vs. Arg/Arg	His/His + Arg/His vs. Arg/Arg	His/His vs. Arg/Arg + Arg/His		
							Arg/Ar	Arg/His	His/His	Arg/Ar	Arg/His	His/His						
1	Chacko et al. 2005	India	Asia	Indian	63/63	Pre	47	16		51	12		–	–	1.44 (0.62, 3.70)	–	–	11
2	Chacko et al. 2005	India	Asia	Indian	60/30	Post	52	8		8	22		–	–	0.26 (0.10, 0.66)	–	–	11
3	Zhai et al. 2006	China	Asia	Asian	206/218	Pre	153	53		176	42		–	–	–	–	–	17
4	Zhai et al. 2006	China	Asia	Asian	250/269	Post	198	52		202	67		–	–	–	–	–	17
5	Zhang et al. 2006	USA	North America	Caucasian	598/439	Pre	536	61	1	391	46	2	1.00 (0.60, 1.40)	0.30 (0.00, 3.50)	–	–	0.6085	15
6	Zhang et al. 2006	USA	North America	Caucasian	863/705	Post	776	84	3	642	62	1	1.10 (0.80, 1.60)	2.20 (0.20, 21.20)	–	–	0.6941	15
7	Sangrajrang et al. 2008	Thailand	Asia	Asian	268/245	Pre	232	36		207	38		–	–	0.99 (0.58, 1.70)	–	–	13
8	Sangrajrang et al. 2008	Thailand	Asia	Asian	239/180	Post	199	40		159	21		–	–	1.71 (0.94, 3.10)	–	–	13
9	Özgöz et al. 2019	Turkey	Asia	Caucasian	102/100	Post	92	9	1	82	17	1	0.24 (0.04, 1.22)	17.20 (0.24, 1226.40)	2.02 (0.88, 4.62)	–	0.9097	9