

Table SI. Primers used for the OGG1 gene.

Exons	Forward (5'-3')	Reverse (5'-3')	Product size (bp)
1	TCTTTGGGCGTCGACGAGG	GAGGGGACAGGCTTCTCAG	238
2	ATTGAGTGCCAGGGTTGTCA	CTGAGTCATAGAGAAGTGACT	348
3	CCCAACAGCAGGTACCTCT	TTGAAAGCTGATGGAAGGCC	272
4	GGAGAACTTGAAGATGCCT	GCTCATTTCTGCTCTCCT	296
5-6	TCTTCCACAAGGGCTCATTC	AAACCTAGGGAGGACACCTA	410
7	ACCTCCCAACACTGTCATA	CCCTCCCAACATGAGAC	264
8	AAAGGCTGTGGCCCACGCA	AAGATGATCGCCATTAGCTCCA	453

Table SII. BRCA1 Germline rare variants (MAF <5%) carried by 14 out of the 59 patients with BC/OC.

Patient code	Age range at diagnosis (years)	Type of tumor	Vertical BC/OC transmission	Family history: Cancer site	Nucleotide change(s)	Effect	SNP	Expected clinical significance ^a	Word population MAF ^b
B43	45-50	BC	Yes	-	c.1067 A>G	Gln356Arg	rs1799950	N	0.02
B64	35-40	BC	Yes	-	c.1067 A>G	Gln356Arg	rs1799950	N	0.02
B72	45-50	BC	Yes	PC	c.4039 A>G	Arg1347Gly	rs28897689	N	0.01
B73	40-45	BC	Yes	-	c.3119 G>A	Ser1040Asn	rs4986852	N	0.01
B74#1	40-45	OC	Yes	-	Del. Ex 1A/1B-2	Δ 1-2	-	D	-
B76	35-40	BC	Yes	-	c.2566 T>C	Tyr856His	rs80356892	N	>0.01
B99	30-35	BC	No	-	c.2077 G>A	Asp693Asn	rs4986850	N	0.03
B100	35-40	BC	No	-	c.2077 G>A	Asp693Asn	rs4986850	N	0.03
B101	35-40	BC	No	BC	c.2077 G>A	Asp693Asn	rs4986850	N	0.03
B105	45-50	BC/OC	Yes	OC	c.4117 G<T	Glu1373Ter	rs80357259	D	>0.01
B111	40-45	OC	Yes	-	c.181 T>G	Cys61Gly	rs28897672	D	>0.01
BM2	35-40	BC/Lym	Yes	-	c.3119 G>A	Ser1040Asn	rs4986852	N	0.01
BM16	50-55	BC	Yes	BC	c.1067A>G	Gln356Arg	rs1799950	N	0.02
BM25	50-55	BC	Yes	-	c.3119 G>A	Ser1040Asn	rs4986852	N	0.01

^aExpected clinical significance based on the ClinVar-NCBI database. ^bData based on Ensembl genome browser 91. D, deleterious; N, most likely neutral; BC, breast cancer; OC, ovarian cancer; PC, pancreatic cancer; Lym, lymphoma.