

**Supplementary Table S4: Frequency distribution of the UNG variant rs34259 among FBOC groups**

	Allele Frequency			Genotype Frequency				
	G	C	p-value <sup>b</sup>	GG	GC	CC	GC/CC	p-value <sup>b</sup>
IBS <sup>a</sup>	171 (79.9%)	43 (20.1%)		69 (64.5%)	33 (30.8%)	5 (4.7%)	38 (34.0%)	
BRCA1	75 (73.5%)	27 (26.5%)	0.2018	25 (49.0%)	25 (49.0%)	1 (2.0%)	26 (51.0%)	0.0943
BRCA2	96 (77.4%)	28 (22.6%)	0.5885	39 (62.9%)	18 (29.0%)	5 (8.1%)	23 (37.1%)	0.8402
BRCA1/2	171 (75.7%)	55 (24.3%)	0.2850	64 (56.6%)	43 (38.1%)	6 (5.3%)	49 (43.4%)	0.5620
BRCAX	186 (77.5%)	54 (22.5%)	0.5323	70 (58.3%)	46 (38.3%)	4 (3.3%)	50 (41.7%)	0.5888
CONTROLS	167 (75.2%)	55 (24.8%)	0.2417	65 (58.6%)	37 (33.3%)	9 (8.1%)	46 (41.4%)	0.6196
FBOC	524 (76.2%)	164 (23.8%)	0.2553	199 (57.8%)	126 (36.6%)	19 (5.5%)	145 (42.2%)	0.5146

<sup>a</sup>Set of samples of the Iberian Populations in Spain of the 1000 Genomes Project Phase 3

<sup>b</sup> $\chi^2$  vs IBS