

Supplementary Table 1: Exclusion criteria for breast cancer patients for this study

| Exclusion criteria | N |
|---|----------|
| Male breast cancer patients | 7 |
| Diagnosed with non-invasive breast cancer | 149 |
| Insufficient or low-quality genomic DNA samples | 66 |
| Ethnicity other than Chinese, Malay, or Indian | 65 |
| Nationality other than Malaysian | 10 |
| Relatives of proband | 3 |
| Duplicate records | 2 |

Supplementary Table 2: Exclusion criteria for control subjects for this study

| Exclusion criteria | N |
|---|----------|
| Personal history of breast cancer | 6 |
| Insufficient or low-quality genomic DNA samples | 7 |
| Ethnicity other than Chinese, Malay, or Indian | 177 |

Supplementary Table 3: Demographic characteristics and known breast cancer risk factors of study participants stratified by ethnicity ^a

| Category | Chinese | | | Malay | | | Indian | | |
|---|----------------------|-------------------------|---------|--------------------|-----------------------|---------|--------------------|-----------------------|---------|
| | Cases (N = 1,726) | Controls (N = 1,686) | P value | Cases (N = 490) | Controls (N = 547) | P value | Cases (N = 359) | Controls (N = 576) | P value |
| Demographic factors | | | | | | | | | |
| Age (year ± s.d.) | 52.7 ± 8.3 | 50.6 ± 10.8 | <0.001 | 51.6 ± 7.5 | 46.8 ± 10.3 | <0.001 | 53.6 ± 8.2 | 51.5 ± 10.7 | 0.001 |
| Age distribution | | | | | | | | | |
| <30 | 34 (2.0) | 0 | <0.001 | 25 (5.1) | 0 | <0.001 | 8 (2.2) | 0 | <0.001 |
| 30-39 | 219 (13.0) | 5 (0.3) | | 93 (19.1) | 3 (0.5) | | 39 (10.9) | 2 (0.3) | |
| 40-49 | 551 (32.6) | 669 (39.7) | | 166 (34.1) | 238 (43.6) | | 104 (29.1) | 194 (33.7) | |
| 50-59 | 532 (31.5) | 636 (37.8) | | 148 (30.4) | 211 (38.6) | | 124 (34.6) | 240 (41.7) | |
| ≥60 | 352 (20.9) | 374 (22.2) | | 55 (11.3) | 94 (17.2) | | 83 (23.2) | 139 (24.2) | |
| Family history | | | | | | | | | |
| No. of first degree relatives with breast cancer | | | | | | | | | |
| 0 | 1,483 (85.9) | 1,448 (86.0) | 0.037 | 430 (87.8) | 503 (92.0) | 0.112 | 311 (86.6) | 503 (87.8) | 0.939 |
| 1 | 217 (12.6) | 202 (12.0) | | 49 (10.0) | 38 (6.9) | | 43 (12.0) | 64 (11.2) | |
| 2 | 21 (1.2) | 34 (2.0) | | 10 (2.0) | 6 (1.1) | | 4 (1.1) | 5 (0.9) | |
| 3 | 5 (0.3) | 0 | | 1 (0.2) | 0 | | 1 (0.3) | 1 (0.2) | |
| No. of second degree relatives with breast cancer | | | | | | | | | |
| 0 | 1,542 (89.3) | 1,571 (93.3) | 0.001 | 450 (91.8) | 520 (95.1) | 0.066 | 330 (91.9) | 549 (95.8) | 0.018 |
| 1 | 156 (9.0) | 102 (6.1) | | 36 (7.3) | 22 (4.0) | | 27 (7.5) | 24 (4.2) | |
| 2 | 24 (1.4) | 9 (0.5) | | 4 (0.8) | 5 (0.9) | | 2 (0.6) | 0 | |
| 3 | 3 (0.2) | 2 (0.1) | | 0 | 0 | | 0 | 0 | |
| 4 | 1 (0.1) | 0 | | 0 | 0 | | 0 | 0 | |

| | | | | | | | | | |
|--|----------------|----------------|--------|----------------|----------------|-------|----------------|----------------|-------|
| Reproductive risk factors | | | | | | | | | |
| Age at menarche (year \pm s.d.) | 12.9 \pm 1.4 | 13.0 \pm 1.5 | 0.028 | 13.0 \pm 1.4 | 12.8 \pm 1.4 | 0.012 | 12.8 \pm 1.4 | 12.9 \pm 1.4 | 0.205 |
| Postmenopausal | | | | | | | | | |
| No | 688 (45.0) | 745 (44.3) | 0.665 | 245 (56.1) | 266 (48.7) | 0.022 | 133 (39.9) | 206 (35.8) | 0.210 |
| Yes | 840 (55.0) | 938 (55.7) | | 192 (43.9) | 280 (51.3) | | 200 (60.1) | 370 (64.2) | |
| Age at menopause (year \pm s.d.) ^b | 49.5 \pm 4.6 | 49.5 \pm 4.8 | 0.971 | 49.5 \pm 4.5 | 49.5 \pm 4.3 | 0.934 | 48.6 \pm 5.4 | 48.8 \pm 4.9 | 0.669 |
| No. of live birth (year \pm s.d.) ^c | 2.6 \pm 1.0 | 2.8 \pm 1.3 | <0.001 | 3.5 \pm 1.4 | 3.4 \pm 1.5 | 0.247 | 2.7 \pm 1.1 | 3.0 \pm 1.4 | 0.003 |
| Age at first live birth (year \pm s.d.) ^c | 27.9 \pm 4.6 | 26.7 \pm 4.9 | <0.001 | 26.1 \pm 4.2 | 25.4 \pm 4.3 | 0.019 | 26.6 \pm 5.2 | 25.9 \pm 5.2 | 0.071 |
| Other risk factors | | | | | | | | | |
| Oral contraceptive ^d | | | | | | | | | |
| No | 1,156 (72.2) | 1,202 (71.6) | 0.716 | 294 (63.0) | 334 (61.1) | 0.536 | 289 (82.6) | 480 (83.3) | 0.764 |
| Yes | 445 (27.8) | 476 (28.4) | | 173 (37.0) | 213 (38.9) | | 61 (17.4) | 96 (16.7) | |
| Hormone replacement therapy ^d | | | | | | | | | |
| No | 1,439 (91.7) | 1,461 (87.1) | <0.001 | 407 (92.7) | 477 (87.4) | 0.006 | 312 (91.8) | 491 (85.4) | 0.004 |
| Yes | 131 (8.3) | 217 (12.9) | | 32 (7.3) | 69 (12.6) | | 28 (8.2) | 84 (14.6) | |

s.d.: Standard deviation

^a Unless otherwise specified, data are presented in no. (%); For each data type, the total number of subjects may differ because of missing or incomplete data.

^b Among postmenopausal women

^c Among parous women

^d Ever user

Supplementary Table 4: The spectrum of *BRCA1* VUS identified in Malaysian cases and controls

| No. | AGVD class | Nucleotide change | Amino acid change | N (Cases) | | | | N (Controls) | | | |
|-----|------------|-------------------|-------------------|-----------|-------|--------|-------|--------------|-------|--------|-------|
| | | | | Chinese | Malay | Indian | Total | Chinese | Malay | Indian | Total |
| 1 | C15 | c.3724A>G | p.T1242A | - | 1 | - | 1 | - | - | - | - |
| 2 | C15 | c.4185G>T | p.Q1395H | - | 1 | - | 1 | - | - | - | - |
| 3 | C15 | c.5489C>A | p.A1830E | - | 1 | - | 1 | - | - | - | - |
| 4 | C25 | c.5057A>G | p.H1686R | - | 2 | - | 2 | - | - | - | - |
| 5 | C25 | c.2597G>A | p.R866H | - | - | - | - | - | - | 1 | 1 |
| 6 | C45 | c.533T>A | p.V178D | - | 1 | - | 1 | - | 1 | - | 1 |
| 7 | C65 | c.190T>C | p.C64R | 1 | - | - | 1 | - | - | - | - |
| 8 | C65 | c.216C>G | p.S72R | - | 1 | - | 1 | - | 2 | - | 2 |
| 9 | C65 | c.3649T>C | p.S1217P | 2 | - | - | 2 | - | - | - | - |
| 10 | C65 | c.5072C>A | p.T1691K | 2 | - | - | 2 | - | - | - | - |

Supplementary Table 5: The spectrum of *BRCA2* VUS identified in Malaysian cases and controls

| No. | AGVGD class | Nucleotide change | Amino acid change | N (Cases) | | | | N (Controls) | | | |
|-----|-------------|-------------------|-------------------|-----------|-------|--------|-------|--------------|-------|--------|-------|
| | | | | Chinese | Malay | Indian | Total | Chinese | Malay | Indian | Total |
| 1 | C15 | c.3391A>G | p.R1131G | 1 | - | - | 1 | - | - | - | - |
| 2 | C15 | c.3569G>T | p.R1190L | - | 1 | - | 1 | - | 1 | - | 1 |
| 3 | C15 | c.8201C>T | p.P2734L | 1 | - | - | 1 | - | - | - | - |
| 4 | C15 | c.8227G>T | p.G2743C | - | - | 1 | 1 | - | - | 1 | 1 |
| 5 | C15 | c.5048A>T | p.Q1683L | - | - | - | - | - | - | 1 | 1 |
| 6 | C15 | c.7547C>T | p.S2516F | - | - | - | - | - | - | 1 | 1 |
| 7 | C15 | c.7928C>T | p.A2643V | - | - | - | - | 1 | - | - | 1 |
| 8 | C25 | c.8527A>T | p.N2843Y | - | 1 | - | 1 | - | - | - | - |
| 9 | C25 | c.9097A>C | p.T3033P | 2 | - | - | 2 | - | - | - | - |
| 10 | C25 | c.9857T>A | p.I3286N | - | 1 | - | 1 | - | - | - | - |
| 11 | C25 | c.572A>T | p.D191V | - | - | - | - | 1 | - | - | 1 |
| 12 | C25 | c.6231G>C | p.K2077N | - | - | - | - | - | 1 | - | 1 |
| 13 | C55 | c.5986G>A | p.A1996T | - | - | 5 | 5 | - | - | 9 | 9 |
| 14 | C55 | c.7522G>A | p.G2508S | 5 | - | - | 5 | 10 | - | - | 10 |
| 15 | C55 | c.9104A>G | p.Y3035C | 3 | - | - | 3 | 1 | - | - | 1 |
| 16 | C55 | c.6182C>G | p.A2061G | - | - | - | - | 1 | - | - | 1 |
| 17 | C65 | c.7631G>A | p.G2544D | - | 2 | - | 2 | - | 3 | - | 3 |
| 18 | C65 | c.7787G>T | p.G2596V | - | 1 | - | 1 | - | - | - | - |
| 19 | C65 | c.7915C>T | p.P2639S | - | - | 1 | 1 | - | - | - | - |
| 20 | C65 | c.8702G>A | p.G2901D | 4 | - | 1 | 5 | 6 | - | - | 6 |
| 21 | C65 | c.7796A>C | p.E2599A | - | - | - | - | 1 | - | - | 1 |
| 22 | C65 | c.8524C>T | p.R2842C | - | - | - | - | 1 | - | - | 1 |

Supplementary Table 6: The spectrum of *BRCA1* deleterious variants identified in Malaysian breast cancer cases

| No. | Nucleotide change | Amino acid change | N | | | |
|-----|---------------------|-------------------|---------|-------|--------|-------|
| | | | Chinese | Malay | Indian | Total |
| 1 | c.61delA | p.I21fs | - | - | 1 | 1 |
| 2 | c.66dupA | p.E23fs | 1 | - | 1 | 2 |
| 3 | c.68_69delAG | p.E23fs | - | - | 4 | 4 |
| 4 | c.115T>C | p.C39R | - | 2 | - | 2 |
| 5 | c.134+1G>T | - | 1 | - | - | 1 |
| 6 | c.134+2delT | - | 1 | - | - | 1 |
| 7 | c.135-1G>C | - | - | - | 1 | 1 |
| 8 | c.150delA | p.K50fs | - | - | 1 | 1 |
| 9 | c.213-12A>G | - | 1 | - | - | 1 |
| 10 | c.470_471delCT | p.S157* | 2 | - | - | 2 |
| 11 | c.505C>T | p.Q169* | - | 1 | - | 1 |
| 12 | c.594-2A>G | - | 1 | - | - | 1 |
| 13 | c.686_687delCT | p.S229* | - | 1 | - | 1 |
| 14 | c.726delT | p.S242fs | - | 1 | 1 | 2 |
| 15 | c.850C>T | p.Q284* | - | - | 1 | 1 |
| 16 | c.981_982delAT | p.C328* | 1 | - | - | 1 |
| 17 | c.1054G>T | p.E352* | - | - | 1 | 1 |
| 18 | c.1104delA | p.D369fs | 1 | - | - | 1 |
| 19 | c.1204G>T | p.E402* | - | 2 | - | 2 |
| 20 | c.1504_1508delTTAAA | p.L502fs | 1 | - | - | 1 |
| 21 | c.2070_2071delAA | p.R691fs | - | 1 | - | 1 |
| 22 | c.2635G>T | p.E879* | 2 | 1 | - | 3 |
| 23 | c.3008_3009delTT | p.F1003* | - | 1 | - | 1 |
| 24 | c.3288_3289delAA | p.L1098fs | - | 1 | - | 1 |
| 25 | c.3323_3326delTAAA | p.I1108fs | - | 1 | - | 1 |
| 26 | c.3424delG | p.A1142fs | 1 | - | - | 1 |
| 27 | c.3607C>T | p.R1203* | - | - | 1 | 1 |
| 28 | c.3770_3771delAG | p.E1257fs | 2 | - | - | 2 |
| 29 | c.3856delA | p.S1286fs | - | 1 | - | 1 |
| 30 | c.3869_3870delAA | p.K1290fs | - | 1 | - | 1 |
| 31 | c.4065_4068delTCAA | p.N1355fs | 1 | - | - | 1 |
| 32 | c.4148C>G | p.S1383* | 2 | - | - | 2 |
| 33 | c.4258C>T | p.Q1420* | 1 | - | - | 1 |
| 34 | c.4327C>T | p.R1443* | 1 | - | 1 | 2 |
| 35 | c.4562_4563insAGGAG | p.N1521fs | - | - | 1 | 1 |
| 36 | c.4760C>A | p.S1587* | - | - | 1 | 1 |
| 37 | c.5211_5212delAG | p.G1738fs | - | - | 1 | 1 |
| 38 | c.5251C>T | p.R1751* | - | - | 1 | 1 |
| 39 | c.5328dupC | p.T1777fs | - | 2 | - | 2 |
| 40 | c.5332+1G>A | - | 1 | - | - | 1 |
| 41 | c.5503C>T | p.R1835* | - | 1 | - | 1 |

Supplementary Table 7: The spectrum of *BRCA2* deleterious variants identified in Malaysian breast cancer cases

| No. | Nucleotide change | Amino acid change | N | | | |
|-----|--------------------------|-------------------|---------|-------|--------|-------|
| | | | Chinese | Malay | Indian | Total |
| 1 | c.-39-1_-39delGA | - | 1 | - | - | 1 |
| 2 | c.262_263delCT | p.L88fs | - | 7 | - | 7 |
| 3 | c.631+1G>A | - | 1 | - | - | 1 |
| 4 | c.774_775delAA | p.E260fs | 1 | - | - | 1 |
| 5 | c.809C>G | p.S270* | 2 | - | - | 2 |
| 6 | c.956dupA | p.N319fs | 1 | - | - | 1 |
| 7 | c.1773_1776delTTAT | p.I591fs | 1 | - | - | 1 |
| 8 | c.2471_2476delTAAATG | p.L824* | - | 1 | - | 1 |
| 9 | c.2595delA | p.E866fs | 1 | - | - | 1 |
| 10 | c.2612C>A | p.S871* | 1 | - | - | 1 |
| 11 | c.2808_2811delACAA | p.A938fs | 2 | - | - | 2 |
| 12 | c.2830A>T | p.K944* | 1 | - | - | 1 |
| 13 | c.3109C>T | p.Q1037* | 1 | - | - | 1 |
| 14 | c.3680_3681delTG | p.L1227fs | - | 1 | - | 1 |
| 15 | c.3847_3848delGT | p.V1283fs | 1 | - | - | 1 |
| 16 | c.3865_3868delAAAT | p.K1289fs | - | - | 1 | 1 |
| 17 | c.3922G>T | p.E1308* | 1 | - | - | 1 |
| 18 | c.3957_3958delTG | p.N1319fs | 1 | - | - | 1 |
| 19 | c.4003G>T | p.E1335* | - | - | 1 | 1 |
| 20 | c.4037_4038delCT | p.T1346fs | - | 2 | - | 2 |
| 21 | c.4467_4474delinsTGTTTTT | p.K1489fs | 1 | - | - | 1 |
| 22 | c.4525C>T | p.Q1509* | 1 | - | - | 1 |
| 23 | c.4872_4873delTG | p.E1625fs | 1 | - | - | 1 |
| 24 | c.5047C>T | p.Q1683* | - | - | 1 | 1 |
| 25 | c.5073dupA | p.W1692fs | 1 | - | - | 1 |
| 26 | c.5213_5216delCTTA | p.T1738fs | - | - | 1 | 1 |
| 27 | c.5576_5579delTTAA | p.I1859fs | 1 | - | - | 1 |
| 28 | c.5645C>A | p.S1882* | 1 | - | - | 1 |
| 29 | c.5681dupA | p.Y1894 * | 1 | - | - | 1 |
| 30 | c.5727_5728insG | p.D1910fs | - | - | 1 | 1 |
| 31 | c.5967dupA | p.D1990fs | - | 2 | - | 2 |
| 32 | c.6082_6086delGAAGA | p.E2028fs | - | - | 1 | 1 |
| 33 | c.6325_6326delGT | p.V2109* | 1 | - | - | 1 |
| 34 | c.6405_6409delCTTAA | p.N2135fs | 1 | - | - | 1 |
| 35 | c.6468_6469dupTC | p.Q2157fs | - | - | 1 | 1 |
| 36 | c.6541G>T | p.G2181* | - | 1 | - | 1 |
| 37 | c.6591_6592delTG | p.E2198fs | 1 | - | - | 1 |
| 38 | c.6673delA | p.T2225fs | 1 | - | - | 1 |
| 39 | c.7007G>T | p.R2336L | 1 | - | - | 1 |
| 40 | c.7379_7382delACAA | p.N2460fs | 1 | - | - | 1 |
| 41 | c.7467dupT | p.I2490fs | - | 1 | - | 1 |

| | | | | | | |
|----|--------------------|-----------|---|---|---|---|
| 42 | c.7558C>T | p.R2520* | 1 | - | - | 1 |
| 43 | c.7629T>G | p.Y2543* | 1 | - | - | 1 |
| 44 | c.7673_7674delAG | p.E2558fs | - | 1 | - | 1 |
| 45 | c.7976+1G>A | - | 1 | - | - | 1 |
| 46 | c.8023A>G | p.I2675V | 1 | - | - | 1 |
| 47 | c.8234_8237delTGAC | p.L2745fs | 1 | - | - | 1 |
| 48 | c.8869C>T | p.Q2957* | - | - | 1 | 1 |
| 49 | c.9097delA | p.T3033fs | 1 | - | - | 1 |
| 50 | c.9097dupA | p.T3033fs | 1 | - | - | 1 |
| 51 | c.9098_9099insA | p.Q3034fs | 1 | - | - | 1 |
| 52 | c.9271_9274dupGTCT | p.Y3092fs | - | - | 1 | 1 |
| 53 | c.9276T>G | p.Y3092* | - | - | 1 | 1 |
| 54 | c.9294C>G | p.Y3098* | 1 | - | - | 1 |
| 55 | c.9294C>A | p.Y3098* | 1 | - | - | 1 |
| 56 | c.9330dupT | p.E3111* | 1 | - | - | 1 |

Supplementary Table 8: The spectrum of *BRCA1* deleterious variants identified in Malaysian controls

| No. | Nucleotide change | Amino acid change | N | | | |
|----------------|-------------------|-------------------|---------|-------|--------|-------|
| | | | Chinese | Malay | Indian | Total |
| 1 | c.594-1G>T | - | - | - | 1 | 1 |
| 2 | c.3097G>T | p.E1033* | - | 1 | - | 1 |
| 3 ^a | c.4327C>T | p.R1443* | - | - | 1 | 1 |
| 4 | c.4356delA | p.A1453fs | 1 | - | - | 1 |
| 5 | c.5335delC | p.Q1779fs | 1 | - | - | 1 |

^a Also detected in breast cancer cases

Supplementary Table 9: The spectrum of *BRCA2* deleterious variants identified in Malaysian controls

| No. | Nucleotide change | Amino acid change | N | | | |
|----------------|-------------------|-------------------|---------|-------|--------|-------|
| | | | Chinese | Malay | Indian | Total |
| 1 ^a | c.262_263delCT | p.L88fs | - | 1 | - | 1 |
| 2 | c.2677C>T | p.Q893* | 1 | - | - | 1 |
| 3 | c.2957dupA | p.N986fs | 1 | - | - | 1 |
| 4 | c.4793_4794delTC | p.L1598fs | - | 1 | - | 1 |
| 5 | c.7558C>T | p.R2520* | 1 | - | - | 1 |
| 6 | c.9117G>A | p.P3039P | 1 | - | - | 1 |

^a Also detected in breast cancer cases

Supplementary Table 10: Clinicopathological characteristics of *BRCA1* and *BRCA2* mutation carriers across ethnicities ^a

| Clinical variables | Chinese | Malay | Indian | P value |
|--|----------------|-----------------|-----------------|---------|
| <i>BRCA1</i> | N = 21 | N = 17 | N = 17 | |
| Age (year \pm s.d.) | 41.3 \pm 9.8 | 39.4 \pm 12.0 | 41.7 \pm 10.6 | 0.804 |
| Age distribution | | | | |
| <30 | 2 (9.5) | 5 (29.4) | 2 (11.8) | 0.688 |
| 30-39 | 9 (42.9) | 5 (29.4) | 5 (29.4) | |
| 40-49 | 6 (28.6) | 3 (17.6) | 6 (35.3) | |
| 50-59 | 3 (14.3) | 3 (17.6) | 4 (23.5) | |
| \geq 60 | 1 (4.8) | 1 (5.9) | 0 | |
| Family history of breast cancer up to first-degree | | | | |
| No | 13 (61.9) | 14 (82.4) | 10 (58.8) | 0.275 |
| Yes | 8 (38.1) | 3 (17.6) | 7 (41.2) | |
| Family history of breast cancer up to second-degree | | | | |
| No | 11 (52.4) | 12 (70.6) | 9 (52.9) | 0.459 |
| Yes | 10 (47.6) | 5 (29.4) | 8 (47.1) | |
| Family history of ovarian cancer up to first-degree | | | | |
| No | 18 (85.7) | 16 (94.1) | 16 (94.1) | 0.574 |
| Yes | 3 (14.3) | 1 (5.9) | 1 (5.9) | |
| Family history of ovarian cancer up to second-degree | | | | |
| No | 18 (85.7) | 15 (88.2) | 16 (94.1) | 0.704 |
| Yes | 3 (14.3) | 2 (11.8) | 1 (5.9) | |
| Bilateral breast cancer | | | | |
| No | 16 (76.2) | 17 (100) | 12 (70.6) | 0.059 |
| Yes | 5 (23.8) | 0 | 5 (29.4) | |
| Ovarian cancer | | | | |
| No | 21 (100) | 17 (100) | 15 (88.2) | 0.098 |
| Yes | 0 | 0 | 2 (11.8) | |
| Grade (%) | | | | |
| I | 1 (7.1) | 0 | 0 | 0.083 |
| II | 3 (21.4) | 0 | 5 (45.5) | |
| III | 10 (71.4) | 11 (100) | 6 (54.5) | |
| Lymph node | | | | |
| Negative | 13 (68.4) | 9 (60.0) | 8 (61.5) | 0.861 |
| Positive | 6 (31.6) | 6 (40.0) | 5 (38.5) | |
| Stage | | | | |
| I | 4 (25.0) | 2 (14.3) | 4 (33.3) | 0.605 |
| II | 9 (56.3) | 6 (42.9) | 6 (50.0) | |
| III | 3 (18.8) | 5 (35.7) | 2 (16.7) | |
| IV | 0 | 1 (7.1) | 0 | |
| ER | | | | |
| Negative | 15 (78.9) | 12 (80.0) | 11 (84.6) | 0.918 |
| Positive | 4 (21.1) | 3 (20.0) | 2 (15.4) | |
| PR | | | | |
| Negative | 13 (81.3) | 12 (80.0) | 11 (91.7) | 0.677 |
| Positive | 3 (18.8) | 3 (20.0) | 1 (8.3) | |
| HER2 | | | | |
| Negative | 15 (88.2) | 14 (93.3) | 14 (100) | 0.418 |

| | | | | |
|--|-----------------|-----------------|-----------------|-------|
| Positive | 2 (11.8) | 1 (6.7) | 0 | |
| TNBC | | | | |
| No | 3 (21.4) | 4 (26.7) | 2 (16.7) | 0.822 |
| Yes | 11 (78.6) | 11 (73.3) | 10 (83.3) | |
| Ki-67 | | | | |
| Low | 2 (40.0) | 0 | 0 | 0.439 |
| High | 3 (60.0) | 1 (100) | 0 | |
| BRCA2 | N = 40 | N = 16 | N = 10 | |
| Age (year \pm s.d.) | 45.6 \pm 11.2 | 43.6 \pm 10.0 | 49.8 \pm 10.5 | 0.369 |
| Age distribution | | | | |
| <30 | 0 | 2 (12.5) | 0 | 0.053 |
| 30-39 | 14 (35.9) | 3 (18.8) | 3 (30.0) | |
| 40-49 | 11 (28.2) | 7 (43.8) | 3 (30.0) | |
| 50-59 | 9 (23.1) | 3 (18.8) | 0 | |
| \geq 60 | 5 (12.8) | 1 (6.3) | 4 (40.0) | |
| Family history of breast cancer up to first-degree | | | | |
| No | 31 (77.5) | 8 (50.0) | 8 (80.0) | 0.097 |
| Yes | 9 (22.5) | 8 (50.0) | 2 (20.0) | |
| Family history of breast cancer up to second-degree | | | | |
| No | 27 (67.5) | 7 (43.8) | 7 (70.0) | 0.218 |
| Yes | 13 (32.5) | 9 (56.3) | 3 (30.0) | |
| Family history of ovarian cancer up to first-degree | | | | |
| No | 39 (97.5) | 16 (100) | 8 (80.0) | 0.036 |
| Yes | 1 (2.5) | 0 | 2 (20.0) | |
| Family history of ovarian cancer up to second-degree | | | | |
| No | 39 (97.5) | 16 (100) | 8 (80.0) | 0.036 |
| Yes | 1 (2.5) | 0 | 2 (20.0) | |
| Bilateral breast cancer | | | | |
| No | 36 (90.0) | 15 (93.8) | 9 (90.0) | 0.902 |
| Yes | 4 (10.0) | 1 (6.3) | 1 (10.0) | |
| Ovarian cancer | | | | |
| No | 40 (100) | 16 (100) | 9 (90.0) | 0.058 |
| Yes | 0 | 0 | 1 (10.0) | |
| Grade (%) | | | | |
| I | 0 | 0 | 0 | 0.574 |
| II | 17 (53.1) | 6 (60.0) | 2 (33.3) | |
| III | 15 (46.9) | 4 (40.0) | 4 (66.7) | |
| Lymph node | | | | |
| Negative | 17 (47.2) | 4 (33.3) | 3 (50.0) | 0.675 |
| Positive | 19 (52.8) | 8 (66.7) | 3 (50.0) | |
| Stage | | | | |
| I | 8 (24.2) | 4 (28.6) | 0 | 0.679 |
| II | 11 (33.3) | 5 (35.7) | 2 (50.0) | |
| III | 9 (27.3) | 2 (14.3) | 2 (50.0) | |
| IV | 5 (15.2) | 3 (21.4) | 0 | |
| ER | | | | |
| Negative | 7 (18.9) | 2 (16.7) | 2 (28.6) | 0.805 |
| Positive | 30 (81.1) | 10 (83.3) | 5 (71.4) | |
| PR | | | | |

| | | | | |
|----------|-----------|----------|----------|-------|
| Negative | 17 (48.6) | 4 (36.4) | 2 (33.3) | 0.660 |
| Positive | 18 (51.4) | 7 (63.6) | 4 (66.7) | |
| HER2 | | | | |
| Negative | 29 (82.9) | 9 (81.8) | 6 (100) | 0.538 |
| Positive | 6 (17.1) | 2 (18.2) | 0 | |
| TNBC | | | | |
| No | 28 (84.8) | 10 (100) | 5 (83.3) | 0.414 |
| Yes | 5 (15.2) | 0 | 1 (16.7) | |
| Ki-67 | | | | |
| Low | 4 (57.1) | 0 | 0 | NA |
| High | 3 (42.9) | 0 | 0 | |

s.d.: Standard deviation

^a Unless otherwise specified, data are presented in no. (%); For each data type, the total number of subjects may differ because of missing or incomplete data.