**Breast cancer risk factor associations differ for pure versus invasive carcinoma with an *in situ* component in case-control and case-case analyses**

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**Supplementary Table 1**. Associations between breast cancer risk factors and pure IDC in the WCHS (n=1,801)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | AA | | |  | EA | | |
|  | Pure IDC | Controls | OR (95% CI)a |  | Pure IDC | Controls | OR (95% CI)a |
|  | N=114 | N=905 |  | N=67 | N=715 |
|  | N (%) | N (%) |  | N (%) | N (%) |
| Family history |  |  |  |  |  |  |  |
| No | 98 (86.0) | 800 (85.4) | 1.00 |  | 49 (73.1) | 596 (83.4) | 1.00 |
| Yes | 16 (14.0) | 105 (11.6) | 1.29 (0.72, 2.32) |  | 18 (26.9) | 119 (16.6) | 1.86 (1.01, 3.43) |
|  |  |  | P=0.39 |  |  |  | P=0.05 |
| Age at menarche (yrs) |  |  |  |  |  |  |  |
| ≥14 | 33 (29.0) | 241 (26.6) | 1.00 |  | 12 (17.9) | 166 (23.5) | 1.00 |
| 12 to 13 | 48 (42.1) | 410 (45.3) | 0.98 (0.60, 1.59) |  | 32 (47.8) | 375 (53.0) | 1.11 (0.55, 2.25) |
| <12 | 33 (29.0) | 254 (28.1) | 1.18 (0.69, 2.02) |  | 23 (34.3) | 166 (23.5) | 1.81 (0.85, 3.84) |
|  |  |  | P-trend=0.55 |  |  |  | P-trend=0.10 |
| OC use (mos) |  |  |  |  |  |  |  |
| 0 | 48 (42.1) | 394 (43.6) | 1.00 |  | 26 (38.8) | 210 (29.4) | 1.00 |
| 1 to 72 | 36 (31.6) | 330 (36.5) | 1.05 (0.65, 1.69) |  | 22 (32.8) | 278 (38.9) | 0.91 (0.48, 1.73) |
| >72 | 30 (26.3) | 180 (19.9) | 1.75 (1.05, 2.92) |  | 19 (28.4) | 227 (31.8) | 0.99 (0.51, 1.95) |
|  |  |  | P-trend=0.05 |  |  |  | P-trend=0.98 |
| Postmenopausal MHT use | |  |  |  |  |  |  |
| No | 37 (74.0) | 344 (79.8) | 1.00 |  | 14 (46.7) | 172 (53.4) | 1.00 |
| Yes | 13 (26.0) | 87 (20.2) | 2.70 (0.66, 11.0) |  | 16 (53.3) | 150 (46.6) | 1.08 (0.43, 2.74) |
|  |  |  | P=0.17 |  |  |  | P=0.87 |
| Current BMI (kg/m2), *Premenopausal* | | |  |  |  |  |  |
| <25 | 13 (20.3) | 103 (21.9) | 1.00 |  | 18 (50.0) | 194 (49.9) | 1.00 |
| 25 to <30 | 18 (28.1) | 136 (28.9) | 1.00 (0.45, 2.19) |  | 6 (16.7) | 95 (24.4) | 0.46 (0.16, 1.35) |
| ≥30 | 33 (51.6) | 231 (49.2) | 1.10 (0.53, 2.28) |  | 12 (33.3) | 100 (25.7) | 1.00 (0.42, 2.35) |
|  |  |  | P-trend=0.76 |  |  |  | P-trend=0.89 |
| Current BMI (kg/m2), *Postmenopausal* | | |  |  |  |  |  |
| <25 | 13 (28.9) | 57 (13.5) | 1.00 |  | 14 (48.3) | 127 (40.5) | 1.00 |
| 25 to <30 | 16 (35.6) | 121 (28.6) | 0.50 (0.22, 1.15) |  | 7 (24.1) | 95 (30.3) | 0.90 (0.32, 2.58) |
| ≥30 | 16 (35.6) | 245 (57.9) | 0.22 (0.10, 0.51) |  | 8 (27.6) | 92 (29.3) | 0.84 (0.30, 2.41) |
|  |  |  | P-trend=0.0003 |  |  |  | P-trend=0.74 |
| Smoking |  |  |  |  |  |  |  |
| No | 77 (67.5) | 513 (57.0) | 1.00 |  | 36 (53.7) | 396 (55.4) | 1.00 |
| Current/Former | 37 (32.5) | 392 (43.3) | 0.69 (0.44, 1.08) |  | 31 (46.3) | 319 (44.6) | 0.89 (0.52, 1.54) |
|  |  |  | P=0.10 |  |  |  | P=0.69 |
| Parity |  |  |  |  |  |  |  |
| 0 | 14 (12.3) | 148 (16.4) | 1.00 |  | 24 (35.8) | 205 (28.7) | 1.00 |
| 1 | 22 (19.3) | 210 (23.2) | 0.96 (0.47, 1.97) |  | 9 (13.4) | 131 (18.4) | 0.54 (0.24, 1.22) |
| 2 | 38 (33.3) | 236 (26.1) | 1.46 (0.75, 2.83) |  | 22 (6.2) | 236 (33.1) | 0.70 (0.37, 1.31) |
| ≥3 | 40 (35.1) | 311 (34.4) | 0.97 (0.49, 1.89) |  | 12 (17.9) | 142 (19.9) | 0.46 (0.21, 1.01) |
|  |  |  | P-trend=0.93 |  |  |  | P-trend=0.08 |
| Age at first birth (yrs)b | | |  |  |  |  |  |
| ≤22 | 59 (59.0) | 469 (61.8) | 1.00 |  | 9 (20.9) | 89 (17.5) | 1.00 |
| >22 to ≤30 | 32 (32.0) | 180 (23.7) | 1.62 (0.97, 2.68) |  | 22 (51.2) | 229 (45.0) | 1.52 (0.61, 3.80) |
| >30 | 9 (9.0) | 10 (14.5) | 0.69 (0.32, 1.49) |  | 12 (27.9) | 191 (37.5) | 1.37 (0.46, 4.06) |
|  |  |  | P-trend=0.93 |  |  |  | P-trend=0.62 |
| Age at last birth (yrs)c |  |  |  |  |  |  |  |
| ≤28 | 55 (55.0) | 343 (45.2) | 1.00 |  | 11 (25.6) | 111 (21.8) | 1.00 |
| >28 to ≤33 | 25 (25.0) | 194 (25.6) | 0.78 (0.46, 1.32) |  | 16 (37.2) | 162 (31.8) | 1.28 (0.53, 3.08) |
| >33 | 20 (20.0) | 222 (29.3) | 0.48 (0.28, 0.85) |  | 16 (37.2) | 236 (46.4) | 1.09 (0.44, 2.68) |
|  |  |  | P-trend=0.01 |  |  |  | P-trend=0.91 |
| Breastfeeding (mos)c |  |  |  |  |  |  |  |
| None | 53 (53.0) | 395 (52.0) | 1.00 |  | 22 (51.2) | 152 (29.8) | 1.00 |
| >0-12 | 28 (28.0) | 232 (30.5) | 0.80 (0.46, 1.38) |  | 12 (27.9) | 170 (33.3) | 0.57 (0.25, 1.30) |
| >12 | 19 (19.0) | 133 (17.5) | 0.67 (0.35, 1.30) |  | 9 (20.9) | 188 (36.9) | 0.52 (0.21, 1.27) |
|  |  |  | P-trend=0.21 |  |  |  | P-trend=0.13 |

Abbreviations: IDC, invasive ductal carcinoma; WCHS, Women’s Circle of Health Study, OR, Odds Ratio; CI, confidence interval; AA, African American; EA, European American; OC, oral contraceptive; MHT, menstrual hormone therapy; BMI, body mass index

aUnconditional logistic regression models were used to estimate ORs and 95% CIs. All models were adjusted for age, race, birthplace, family history, composite screening score, education, OC use, age at menarche, parity and menopausal status. All associations were adjusted for covariates listed above unless the covariate was the main exposure of interest or was used as a stratification variable (i.e.menopausal status for BMI and MHT use).

bAmong 1,413 parous women only

cAmong 1,413 parous women only, with an additional adjustment for age at first birth

**Supplementary Table 2.** Associations between breast cancer risk factors and mixed IDC/DCIS in the WCHS (n=2,270)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | AA | | |  | EA | | |
|  | Mixed IDC/DCIS | Controls | OR (95% CI)a |  | Mixed IDC/DCIS | Controls | OR (95% CI)a |
|  | N=348 | N=905 |  | N=302 | N=715 |
|  | N (%) | N (%) |  | N (%) | N (%) |
| Family history |  |  |  |  |  |  |  |
| No | 297 (85.3) | 800 (88.4) | 1.00 |  | 229 (75.8) | 596 (83.4) | 1.00 |
| Yes | 51 (14.7) | 105 (11.6) | 1.32 (0.91, 1.91) |  | 73 (24.2) | 119 (16.6) | 1.54 (1.09, 2.18) |
|  |  |  | P=0.14 |  |  |  | P=0.01 |
| Age at menarche (yrs) |  |  |  |  |  |  |  |
| ≥14 | 91 (26.3) | 241 (26.6) | 1.00 |  | 55 (18.6) | 166 (23.5) | 1.00 |
| 12 to 13 | 148 (42.8) | 410 (45.3) | 0.98 (0.71, 1.34) |  | 168 (56.7) | 375 (53.0) | 1.30 (0.90, 1.87) |
| <12 | 107 (30.9) | 254 (28.1) | 1.19 (0.84, 1.67) |  | 73 (24.7) | 166 (23.5) | 1.21 (0.79, 1.85) |
|  |  |  | P-trend=0.45 |  |  |  | P-trend=0.42 |
| OC use (mos) |  |  |  |  |  |  |  |
| 0 | 134 (38.6) | 394 (43.6) | 1.00 |  | 108 (35.8) | 210 (29.3) | 1.00 |
| 1 to 72 | 124 (35.7) | 330 (36.5) | 1.23 (0.91, 1.65) |  | 108 (35.8) | 278 (38.9) | 0.96 (0.68, 1.36) |
| >72 | 89 (25.7) | 180 (19.9) | 1.69 (1.21, 2.36) |  | 86 (28.4) | 227 (31.8) | 0.96 (0.67, 1.38) |
|  |  |  | P-trend=0.003 |  |  |  | P-trend=0.82 |
| Postmenopausal MHT use | | |  |  |  |  |  |
| No | 131 (74.9) | 344 (79.8) | 1.00 |  | 81 (59.1) | 172 (53.4) | 1.00 |
| Yes | 44 (25.1) | 87 (20.2) | 1.34 (0.87, 2.09) |  | 56 (40.9) | 150 (46.6) | 0.68 (0.43, 1.07) |
|  |  |  | P=0.19 |  |  |  | P=0.11 |
| Current BMI (kg/m2), *Premenopausal* | | |  |  |  |  |  |
| <25 | 33 (19.3) | 103 (21.9) | 1.00 |  | 82 (51.6) | 194 (49.9) | 1.00 |
| 25 to <30 | 55 (32.2) | 136 (28.9) | 1.28 (0.76, 2.15) |  | 45 (28.3) | 95 (24.4) | 1.03 (0.64, 1.65) |
| ≥30 | 83 (48.5) | 231 (49.2) | 1.15 (0.70, 1.88) |  | 32 (20.1) | 100 (25.7) | 0.67 (0.40, 1.13) |
|  |  |  | P-trend=0.71 |  |  |  | P-trend=0.17 |
| Current BMI (kg/m2), *Postmenopausal* | | |  |  |  |  |  |
| <25 | 25 (14.6) | 57 (13.5) | 1.00 |  | 46 (34.3) | 127 (40.4) | 1.00 |
| 25 to <30 | 48 (28.1) | 121 (28.6) | 0.94 (0.52, 1.72) |  | 38 (28.4) | 95 (30.3) | 1.08 (0.63, 1.85) |
| ≥30 | 98 (57.3) | 245 (57.9) | 0.89 (0.51, 1.54) |  | 50 (37.3) | 92 (29.3) | 1.32 (0.78, 2.23) |
|  |  |  | P-trend=0.64 |  |  |  | P-trend=0.31 |
| Smoking |  |  |  |  |  |  |  |
| No | 210 (60.3) | 513 (56.7) | 1.00 |  | 155 (51.3) | 396 (55.4) | 1.00 |
| Current/Former | 138 (39.7) | 392 (43.3) | 0.95 (0.72, 1.25) |  | 147 (48.7) | 319 (44.6) | 1.07 (0.80, 1.43) |
|  |  |  | P=0.71 |  |  |  | P=0.68 |
| Parity |  |  |  |  |  |  |  |
| 0 | 57 (16.4) | 148 (16.4) | 1.00 |  | 97 (32.1) | 205 (28.7) | 1.00 |
| 1 | 82 (23.6) | 210 (23.2) | 0.93 (0.62, 1.40) |  | 48 (15.9) | 131 (18.4) | 0.74 (0.49, 1.14) |
| 2 | 93 (26.7) | 236 (26.1) | 0.92 (0.62, 1.38) |  | 97 (32.1) | 236 (33.1) | 0.76 (0.53, 1.08) |
| ≥3 | 116 (33.3) | 311 (34.4) | 0.82 (0.55, 1.21) |  | 60 (19.9) | 142 (19.9) | 0.61 (0.40, 0.93) |
|  |  |  | P-trend=0.31 |  |  |  | P-trend=0.02 |
| Age at first birth (yrs)b | |  |  |  |  |  |  |
| ≤22 | 184 (62.8) | 469 (61.8) | 1.00 |  | 41 (20.0) | 89 (17.5) | 1.00 |
| >22 to ≤30 | 78 (26.6) | 180 (23.7) | 1.12 (0.79, 1.58) |  | 97 (47.3) | 229 (45.0) | 1.33 (0.81, 2.19) |
| >30 | 31 (10.6) | 10 (14.5) | 0.73 (0.46, 1.16) |  | 67 (32.7) | 191 (37.5) | 1.41 (0.80, 2.48) |
|  |  |  | P-trend=0.36 |  |  |  | P-trend=0.29 |
| Age at last birth (yrs)c | |  |  |  |  |  |  |
| ≤28 | 142 (48.5) | 343 (45.2) | 1.00 |  | 47 (22.9) | 111 (21.8) | 1.00 |
| >28 to ≤33 | 71 (24.2) | 194 (25.6) | 0.83 (0.58, 1.17) |  | 75 (36.6) | 162 (31.8) | 1.31 (0.79, 2.18) |
| >33 | 80 (27.3) | 222 (29.2) | 0.81 (0.58, 1.13) |  | 83 (40.5) | 236 (46.4) | 0.95 (0.54, 1.67) |
|  |  |  | P-trend=0.18 |  |  |  | P-trend=0.70 |
| Breastfeeding (mos)c | |  |  |  |  |  |  |
| None | 144 (49.0) | 395 (52.0) | 1.00 |  | 69 (33.7) | 152 (29.8) | 1.00 |
| >0-12 | 87 (29.6) | 232 (30.5) | 1.07 (0.75, 1.52) |  | 84 (40.9) | 170 (33.3) | 1.22 (0.79, 1.87) |
| >12 | 63 (21.4) | 133 (17.5) | 1.16 (0.77, 1.75) |  | 52 (25.4) | 188 (36.9) | 0.78 (0.49, 1.24) |
|  |  |  | P-trend=0.48 |  |  |  | P-trend=0.27 |

Abbreviations: IDC, invasive ductal carcinoma; DCIS, ductal carcinoma in situ; WCHS, Women’s Circle of Health Study; OR, Odds Ratio; CI, confidence interval; AA, African American; EA, European American; OC, oral contraceptive; MHT, menstrual hormone therapy; BMI, body mass index

aUnconditional logistic regression models were used to estimate ORs and 95% CIs. All models were adjusted for age, race, birthplace, family history, composite screening score, education, OC use, age at menarche, parity and menopausal status. All associations were adjusted for covariates listed above unless the covariate was the main exposure of interest or was used as a stratification variable (menopausal status for BMI and MHT use).

bAmong 1,769 parous women only

cAmong 1,769 parous women only, with an additional adjustment for age at first birth

**Supplementary Table 3**. Associations between breast cancer risk factors and odds of pure IDC compared to mixed IDC/DCIS, by ER status, in the Women’s Circle of Health Study, (N=755)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | ER+ | | | ER- | | |
|  | Pure IDC | Mixed IDC/DCIS | OR (95% CI)a | Pure IDC | Mixed IDC/DCIS | OR (95% CI)a |
|  | N=96 | N=450 | N=79 | N=130 |
|  | N (%) | N (%) | N (%) | N (%) |
| Age (yrs) |  |  |  |  |  |  |
| <45 | 25 (26.0) | 121 (26.9) | 0.89 (0.40, 1.95) | 27 (34.2) | 43 (33.1) | 0.93 (0.34, 2.58) |
| ≥45 | 71 (74.0) | 329 (73.1) | 1.00 | 52 (65.8) | 87 (66.9) | 1.00 |
|  |  |  | P=0.76 |  |  | P=0.90 |
| Race |  |  |  |  |  |  |
| AA | 42 (50.6) | 234 (52.0) | 1.00 | 59 (77.6) | 83 (63.9) | 1.00 |
| EA | 41 (49.4) | 216 (48.0) | 1.20 (0.71, 2.05) | 17 (22.4) | 47 (36.1) | 0.53 (0.24, 1.16) |
|  |  |  | P=0.50 |  |  | P=0.11 |
| Family history |  |  |  |  |  |  |
| No | 77 (80.2) | 361 (80.2) | 1.00 | 65 (82.3) | 108 (83.1) | 1.00 |
| Yes | 19 (19.8) | 89 (19.8) | 1.01 (0.57, 1.79) | 14 (17.7) | 22 (16.9) | 1.13 (0.51, 2.54) |
|  |  |  | P=0.96 |  |  | P=0.76 |
| Age at menarche (yrs) |  |  |  |  |  |  |
| ≥14 | 21 (21.9) | 102 (22.7) | 1.00 | 17 (21.5) | 30 (23.1) | 1.00 |
| 12 to 13 | 41 (42.7) | 221 (49.1) | 0.83 (0.46, 1.50) | 41 (51.9) | 66 (50.8) | 1.46 (0.68, 3.12) |
| <12 | 34 (35.4) | 127 (28.2) | 1.27 (0.68, 2.35) | 21 (26.6) | 34 (26.1) | 1.35 (0.57, 3.19) |
|  |  |  | P-trend=0.35 |  |  | P-trend=0.51 |
| OC use (mos) |  |  |  |  |  |  |
| 0 | 40 (41.7) | 166 (37.0) | 1.00 | 32 (40.5) | 48 (36.9) | 1.00 |
| 1 to 72 | 32 (33.3) | 163 (36.3) | 0.82 (0.48, 1.41) | 29 (36.7) | 44 (33.9) | 1.10 (0.55, 2.20) |
| >72 | 24 (25.0) | 120 (26.7) | 0.84 (0.46, 1.52) | 18 (22.8) | 38 (29.2) | 0.85 (0.38, 1.87) |
|  |  |  | P-trend=0.86 |  |  | P-trend=0.73 |
| Postmenopausal MHT use |  |  |  |  |  |  |
| No | 28 (59.6) | 148 (67.9) | 1.00 | 21 (63.6) | 45 (70.3) | 1.00 |
| Yes | 19 (40.4) | 70 (32.1) | 1.38 (0.69, 2.76) | 12 (36.4) | 19 (29.7) | 1.75 (0.64, 4.81) |
|  |  |  | P=0.36 |  |  | P=0.28 |
| Current BMI (kg/m2) *Premenopausal* | |  |  |  |  |  |
| ≤25 | 20 (41.7) | 85 (37.3) | 1.00 | 9 (19.6) | 16 (25.0) | 1.00 |
| >25 to ≤30 | 9 (18.7) | 65 (28.5) | 0.54 (0.22, 1.31) | 11 (23.9) | 24 (37.5) | 0.60 (0.17, 2.09) |
| >30 | 19 (39.6) | 78 (34.2) | 0.86 (0.37, 1.98) | 26 (56.5) | 24 (37.5) | 1.28 (0.38, 4.31) |
|  |  |  | P-trend=0.15 |  |  | P-trend=0.59 |
| Current BMI (kg/m2) *Postmenopausal* | |  |  |  |  |  |
| ≤25 | 14 (31.1) | 50 (23.6) | 1.00 | 10 (32.3) | 15 (23.8) | 1.00 |
| >25 to ≤30 | 14 (31.1) | 56 (26.4) | 0.92 (0.37, 2.25) | 11 (35.5) | 19 (30.2) | 0.62 (0.17, 2.23) |
| >30 | 17 (37.8) | 106 (50.0) | 0.63 (0.27, 1.48) | 10 (32.3) | 29 (46.0) | 0.30 (0.09, 1.06) |
|  |  |  | P-trend=0.14 |  |  | P-trend=0.57 |
| Smoking |  |  |  |  |  |  |
| No | 61 (63.5) | 261 (58.0) | 1.00 | 47 (59.5) | 69 (53.1) | 1.00 |
| Current/Former | 35 (36.5) | 189 (42.0) | 0.83 (0.51, 1.35) | 32 (40.5) | 61 (46.9) | 0.74 (0.39, 1.43) |
|  |  |  | P=0.45 |  |  | P=0.37 |
| Parity |  |  |  |  |  |  |
| 0 | 29 (30.2) | 106 (23.6) | 1.00 | 12 (15.2) | 28 (21.5) | 1.00 |
| 1 | 15 (15.6) | 96 (21.3) | 0.73 (0.34, 1.55) | 14 (17.7) | 23 (17.7) | 1.08 (0.36, 3.20) |
| 2 | 34 (35.4) | 131 (29.1) | 1.15 (0.61, 2.17) | 25 (31.6) | 36 (27.7) | 1.06 (0.41, 2.70) |
| ≥3 | 18 (18.8) | 117 (26.0) | 0.64 (0.30, 1.36) | 28 (35.4) | 43 (33.1) | 0.83 (0.32, 2.17) |
|  |  |  | P-trend=0.54 |  |  | P-trend=0.66 |
| Age at first birth (yrs)b |  |  |  |  |  |  |
| ≤22 | 26 (38.8) | 151 (43.9) | 1.00 | 38 (56.7) | 55 (54.4) | 1.00 |
| >22 to ≤30 | 26 (38.8) | 121 (34.2) | 1.17 (0.60, 2.30) | 23 (34.3) | 35 (34.7) | 1.51 (0.68, 3.37) |
| >30 | 15 (22.4) | 72 (20.9) | 1.14 (0.50, 2.62) | 6 (9.0) | 11 (10.9) | 2.18 (0.55, 8.56) |
|  |  |  | P-trend=0.72 |  |  | P-trend=0.18 |
| Age at last birth (yrs)c |  |  |  |  |  |  |
| ≤28 | 26 (38.8) | 133 (38.7) | 1.00 | 37 (55.2) | 40 (39.6) | 1.00 |
| >28 to ≤33 | 22 (32.8) | 93 (27.0) | 1.08 (0.55, 2.14) | 13 (19.4) | 36 (35.6) | 0.40 (0.16, 0.95) |
| >33 | 19 (28.4) | 118 (34.3) | 0.72 (0.36, 1.44) | 17 (25.4) | 25 (24.8) | 0.84 (0.36, 1.93) |
|  |  |  | P-trend=0.32 |  |  | P-trend=0.40 |
| Breastfeeding (months)c |  |  |  |  |  |  |
| None | 36 (53.7) | 147 (42.7) | 1.00 | 39 (58.2) | 46 (45.1) | 1.00 |
| >0-12 | 21 (31.3) | 119 (34.6) | 0.54 (0.28, 1.05) | 15 (22.4) | 29 (28.4) | 0.48 (0.20, 1.17) |
| >12 | 10 (14.9) | 78 (22.7) | 0.38 (0.17, 0.86) | 13 (19.4) | 27 (26.5) | 0.48 (0.18, 1.24) |
|  |  |  | P-trend=0.04 |  |  | P-trend=0.28 |

Abbreviations: IDC, invasive ductal carcinoma; DCIS, ductal carcinoma in situ; ER, estrogen receptor; OR, Odds Ratio; CI, confidence interval; AA, African American; EA, European American; MHT, menstrual hormone therapy; BMI, body mass index

aUnconditional logistic regression was used to estimate odds of having pure IDC versus mixed IDC/DCIS, with analyses adjusted for age, race, birthplace, family history, composite screening score, education, OC use, age at menarche, parity, menopausal status and ER status. Analysis of MHT use was not adjusted for menopausal status. Associations were adjusted for covariates listed above unless the covariate was the main exposure of interest or was used as a stratification variable.

bAmong 580 parous women only

cAmong 580 parous women only, with an additional adjustment for age at first birth