**Table 3S. Associations of alcohol and tobacco consumption with breast cancer risk for *BRCA1* mutation carriers, adjusted retrospective (weighted) and prospective analyses**

|  | | **retrospective** | **P value** | | | **prospective** | **P value** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **HRa (95% CI)** |  | | | **HRb (95% CI)** |  |
| **Smoking/alcohol status1** | |  |  | | |  |  |
| Never | | 1.00 |  | | | 1.00 |  |
| Ever, alcohol only | | 1.06 (0.90,1.25) | 0.49 | | | 0.94 (0.64,1.37) | 0.75 |
| Ever, smoking only | | 1.12 (0.91,1.38) | 0.28 | | | 0.80 (0.50,1.28) | 0.35 |
| Ever, smoking and  alcohol | | 1.03 (0.88,1.21) | 0.68 | | | 1.21 (0.84,1.74) | 0.31 |
| **Cigarettes per day\*1 (current or past)** | |  |  | | |  |  |
| 0 | | 1.00 |  | | | 1.00 |  |
| < 5 | | 0.99 (0.82,1.19) | 0.91 | | | 1.17 (0.76,1.78) | 0.47 |
| 6-10 | | 1.08 (0.90,1.29) | 0.40 | | | 1.08 (0.73,1.61) | 0.69 |
| 11-20 | | 1.05 (0.90,1.24) | 0.51 | | | 1.05 (0.74,1.50) | 0.78 |
| > 20 | | 1.03 (0.76,1.39) | 0.86 | | | 1.34 (0.72,2.50) | 0.36 |
| Continuous (missing excluded)\*1 | | 1 1.00 (1.00, 1.01) | 0.51 | | | 11 1.01 (0.99, 1.02) | 0.42 |
| **Number of Pack-Years\*1** | |  |  | | |  |  |
| <1 | |  | | | | 1.00 |  |
| 1-20 | | 1.22 (0.92,1.61) | 0.17 |
| >20 | | 0.85 (0.52,1.39) | 0.51 |
| Continuous (missing excluded)\*1 | | 1.00 (0.99, 1.02) | 0.75 |
| **Age at start smoking (years)\*1** | |  |  | | |  |  |
| Never | | 1.00 |  | | | 1.00 |  |
| < 15 | | 1.13 (0.92,1.39) | 0.26 | | | 0.99 (0.65,1.52) | 0.98 |
| 16-19 | | 1.12 (0.96,1.31) | 0.15 | | | 1.25 (0.90,1.74) | 0.18 |
| >20 | | 0.99 (0.80,1.22) | 0.90 | | | 0.91 (0.53,1.58) | 0.74 |
| **Age at start for parous women (years)\*2** | |  |  | | |  |  |
| Never | | 1.00 |  | | | 1.00 |  |
| < 15 | | 1.09 (0.87,1.37) | 0.45 | | | 1.00 (0.65,1.54) | 1.00 |
| 16-19 | | 1.17 (0.98,1.39) | 0.08 | | | 1.05 (0.74,1.49) | 0.79 |
| >20 | | 1.03 (0.82,1.29) | 0.79 | | | 0.87 (0.49,1.56) | 0.64 |
| **Age at start for nulliparous women (years)\*3** | |  |  | | |  |  |
| Never | | 1.00 |  | | | 1.00 |  |
| < 15 | | 1.45 (0.91,2.31) | 0.12 | | | 1.96 (0.71,5.40) | 0.20 |
| 16-19 | | 1.03 (0.73,1.46) | 0.86 | | | 0.96 (0.42,2.19) | 0.92 |
| >20 | | 0.85 (0.50,1.44) | 0.55 | | | 0.81 (0.19,3.54) | 0.78 |
| **Smoking and Parity\*3** | |  |  | | |  |  |
| Never smoke & parous | | 1.00 |  | | | 1.00 |  |
| Never smoke & nulliparous | | 1.66 (1.35,2.04) | 1.3x10-6 | | | 0.55 (0.34,0.88) | 0.01 |
| Ever smoke & nulliparous | | 1.68 (1.36,2.08) | 1.3x10-6 | | | 0.96 (0.61,1.50) | 0.86 |
| Ever smoke & parous | |  |  | | |  |  |
| 5 yrs or less before FFTP | | 1.02 (0.85,1.23) | 0.80 | | | 1.02 (0.69,1.49) | 0.93 |
| > 5 yrs before FFTP | | 1.18 (1.01,1.39) | 0.04 | | | 1.11 (0.80,1.52) | 0.53 |
| **Smoking and Parity\*1** | |  |  | | |  |  |
| Never smoke | | 1.00 |  | | | 1.00 |  |
| Ever smoke | |  |  | | |  |  |
| 5 yrs or less before FFTP/Censure for nulliparous | 1.02 (0.86,1.22) | | | 0.81 | 0.98 (0.64,1.51) | | 0.93 |
| > 5 yrs before FFTP/Censure for nulliparous | 1.14 (0.98,1.32) | | | 0.09 | 1.24 (0.92,1.66) | | 0.15 |
| **Glasses of alcohol last year per day§1** | | |  |  | | |  |  |
| 0 | | |  | | | | 1.00 |  |
| <1 | | | 1.12 (0.81,1.55) | 0.48 |
| 1-2 | | | 1.07 (0.75,1.54) | 0.70 |
| >2 | | | 1.06 (0.55,2.05) | 0.87 |
| Continuous (per glass)§1 | | | 1.07 (0.90,1.27) | 0.44 |
| **Glasses of alcohol per day at age 20 years §1** | | |  |  | | |  |  |
| 0 | | | 1.00 |  | | | 1.00 |  |
| <1 | | | 1.03 (0.89,1.19) | 0.70 | | | 0.95 (0.62,1.45) | 0.82 |
| 1-2 | | | 0.94 (0.77,1.14) | 0.52 | | | 1.09 (0.66,1.81) | 0.74 |
| >2 | | | 0.71 (0.51,1.00) | 0.05 | | | 1.45 (0.73,2.91) | 0.29 |
| Continuous (per glass)§1 | | | 0.91 (0.82,1.00) | 0.05 | | | 1.05 (0.84,1.31) | 0.70 |

**\*** Adjusted for alcohol consumption (ever vs. never)

§ Adjusted for tobacco consumption (ever vs. never)

a Stratified on birth cohort and 5 study groups for the retrospective analyses

b Stratified on birth cohort and 6 study groups for the prospective analyses

1 Adjusted for Bilateral Oophorectomy (yes, no), Age at 1st full-term pregnancy (<30, ≥30+nulliparous), Number of full-term pregnancies (0, 1, ≥2); BMI (<18.5, 18.5–24.9, 25–29.9,30 or greater, missing); OC Use (ever, never, missing), Number of affected relatives with breast cancer (0, 1, ≥2, Unknown), Age at Menarche (<12, ≥12 - <13, ≥13 - <14, ≥14 - <15, >=15, age missing or never had menstrual period).

2 Adjusted for Bilateral Oophorectomy (yes, no), Age at 1st full-term pregnancy (<30, ≥30+nulliparous), BMI (<18.5, 18.5–24.9, 25–29.9,30 or greater, missing); OC Use (ever, never, missing), Number of affected relatives with breast cancer (0, 1, ≥2, Unknown), Age at Menarche (<12, ≥12 - <13, ≥13 - <14, ≥14 - <15, >=15, age missing or never had menstrual period).

3 Adjusted for Bilateral Oophorectomy (yes, no), BMI (<18.5, 18.5–24.9, 25–29.9, 30 or greater, missing); OC Use (ever, never, missing), Number of affected relatives with breast cancer (0, 1, ≥2, Unknown), Age at Menarche (<12, ≥12 - <13, ≥13 - <14, ≥14 - <15, >=15, age missing or never had menstrual period).