**Supplementary Table 4.** Adjusted pooled hazard ratios (pHRs) and 95% confidence intervals (CIs) for the association between cigarette smoking and overall survival among 2,265 women from 7 studies diagnosed with epithelial ovarian cancer (overall and by histotype), analysed using the main statistical model, i.e. without additional adjustment for residual disease

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Overall** |  | **Serous** |  | **Mucinous** | **Endometrioid** |  | **Clear cell** |
|   | **Cases** | **I2 (%)** | **pHR2** | **95% CI** |  | **Cases** | **I2 (%)** | **pHR2** | **95% CI** |  | **Cases** | **I2 (%)** | **pHR2** | **95% CI** |  | **Cases** | **I2 (%)** | **pHR2** | **95% CI** |  | **Cases** | **I2 (%)** | **pHR2** | **95% CI** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Smoking status3** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Never smoker4 | 1,252 | - | 1.00 | Ref. |  | 777 | - | 1.00 | Ref. |  | 50 | - | 1.00 | Ref. |  | 183 | - | 1.00 | Ref. |  | 99 | - | 1.00 | Ref. |
|  Former smoker | 674 | 0.0 | 1.14 | (1.01-1.29) |  | 441 | 0.0 | 1.15 | (1.00-1.32) |  | 27 | 0.0 | 0.81 | (0.25-2.65) |  | 104 | 25.4 | 1.81 | (0.98-3.33) |  | 38 | 61.3 | 1.48 | (0.34-6.49)1 |
|  Current smoker | 339 | 31.9 | 1.26 | (1.01-1.57) |  | 214 | 54.7 | 1.25 | (0.90-1.72) |  | 34 | 0.0 | 1.90 | (0.72-4.99) |  | 39 | 47.4 | 2.01 | (0.73-5.52) |  | 24 | 0.0 | 1.08 | (0.51-2.29) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Cigarette consumption (per day)5** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  1-≤10 | 400 | 25.7 | 1.09 | (0.91-1.30) |  | 265 | 0.0 | 1.13 | (0.96-1.34) |  | 23 | 0.0 | 1.52 | (0.42-5.56) |  | 55 | 20.1 | 1.19 | (0.52-2.70) |  | 23 | 0.0 | 0.54 | (0.20-1.43) |
|  >10-≤20 | 405 | 0.0 | 1.19 | (1.03-1.38) |  | 256 | 0.0 | 1.06 | (0.89-1.27) |  | 29 | 0.0 | 1.05 | (0.33-3.33) |  | 50 | 0.0 | 3.95 | (2.24-6.97) |  | 27 | 53.0 | 1.68 | (0.58-4.90) |
|  >20 | 146 | 0.0 | 1.33 | (1.08-1.65) |  | 100 | 18.8 | 1.40 | (1.06-1.85) |  | 6 | 0.0 | 0.57 | (0.07-4.80) |  | 23 | 51.3 | 1.82 | (0.53-6.31) |  | 7 | 0.0 | 1.36 | (0.15-11.90) |
|  Per 5 cigarettes/day6 |  | 0.0 | 1.03 | (0.99-1.07) |  |  | 1.8 | 1.00 | (0.95-1.05) |  |  |  | NA10 |  |  |  | 0.0 | 1.21 | (1.02-1.44) |  |  | 0.0 | 1.11 | (0.83-1.49) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Duration of smoking before diagnosis7 (years)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  1-≤10 | 178 | 0.0 | 1.00 | (0.81-1.24) |  | 113 | 0.0 | 1.03 | (0.80-1.32) |  | 8 | 0.0 | 0.22 | (0.02-2.52) |  | 32 | 0.0 | 1.95 | (0.83-4.60) |  | 6 |  | NA10 |  |
|  >10-≤20 | 165 | 8.9 | 1.02 | (0.81-1.29) |  | 108 | 0.0 | 0.95 | (0.74-1.22) |  | 12 |  | NA10 |  |  | 20 | 0.0 | 0.92 | (0.34-2.48) |  | 10 | 17.1 | 1.24 | (0.34-4.57) |
|  >20 | 625 | 0.0 | 1.27 | (1.12-1.43) |  | 406 | 0.0 | 1.23 | (1.07-1.43) |  | 40 | 46.3 | 2.01 | (0.25-16.49) |  | 82 | 17.2 | 2.27 | (1.27-4.09) |  | 43 | 43.3 | 1.21 | (0.49-3.01) |
|  Per 5-year period6  |  | 47.0 | 1.03 | (0.98-1.07) |  |  | 39.2 | 1.02 | (0.98-1.08) |  |  | 55.8 | 0.97 | (0.34-2.81) |  |  | 0.0 | 1.08 | (0.96-1.21) |  |  | 11.2 | 1.01 | (0.83-1.23) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Time from cessation to diagnosis (years)8** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  1-≤10 | 138 | 0.0 | 1.42 | (1.13-1.77) |  | 88 | 9.0 | 1.49 | (1.12-1.99) |  | 8 | 0.0 | 2.05 | (0.33-12.89) |  | 21 | 0.0 | 3.48 | (1.53-7.91) |  | 12 | 18.3 | 1.02 | (0.17-6.15) |
|  >10-≤20 | 103 | 0.0 | 1.41 | (1.10-1.82) |  | 59 | 0.0 | 1.26 | (0.92-1.72) |  | 8 |  | NA10 |  |  | 18 | 0.0 | 3.62 | (1.41-9.31) |  | 5 |  | NA10 |  |
|  >20 | 172 | 0.0 | 0.92 | (0.74-1.15) |  | 120 | 0.0 | 0.96 | (0.74-1.24) |  | 3 | 0.0 | 0.46 | (0.04-5.89) |  | 28 | 23.6 | 1.67 | (0.46-6.10) |  | 9 | 0.0 | 0.43 | (0.09-2.01) |
|  Per 5-year period9  |  | 0.0 | 0.94 | (0.90-0.99) |   |  | 0.0 | 0.94 | (0.89-1.00) |   |  | 0.0 | 0.78 | (0.51-1.20) |   |  | 32.8 | 1.00 | (0.75-1.34) |   |  | 0.0 | 0.66 | (0.40-1.10) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Numbers may not sum up to total because of missing data

1P-value for heterogeneity <0.05

2Adjusted for: age (continuous), race/ethnicity (non-Hispanic White, Hispanic White, Black, Asian or other), tumour stage (localised, regional or distant) and grade (well differentiated, moderately differentiated, poorly differentiated or undifferentiated) )

3Number of studies included for analysis: overall = 7; serous = 7, mucinous = 3; endometrioid = 6; clear cell = 5

4Never smokers was used as the reference group for all categorical analyses

5Number of studies included for analysis: overall = 7; serous = 7, mucinous = 3; endometrioid = 6; clear cell = 5

6Among ever smokers

7Number of studies included for analysis: overall = 7; serous = 7, mucinous = 3; endometrioid = 6; clear cell = 5

8Number of studies included for analysis: overall = 6; serous = 6, mucinous = 3; endometrioid = 5; clear cell = 3

9Among former smokers only

10Not applicable due to unreliable model parameters (small numbers of events)