

Supplementary table 2: Odds ratio (OR) with 95% confidence intervals (CI) for adverse secondary outcomes in the second pregnancy of 29 229 mothers who had a caesarean delivery (CD) in the first pregnancy compared with 170 040 mothers who had a previous vaginal delivery (VD), among mothers with information on smoking.

| 1 st birth | 2 nd birth | | | | |
|---------------------------------------|-----------------------|--|----------------------|----------------------|----------------------|
| | | Small for gestational age ^a | Crude OR (CI) | Adj OR (CI)* | Adj OR (CI)** |
| CD 1 st | N (%) | 410 (1.4) | 1.62 (1.45 to 1.81) | 1.33 (1.18 to 1.50) | 1.31 (1.17 to 1.48) |
| VD 1 st | N (%) | 1478 (0.9) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Preterm birth^b | | | | | |
| CD 1 st | N (%) | 1745 (6.0) | 1.70 (1.61 to 1.80) | 1.16 (1.09 to 1.24) | 1.16 (1.09 to 1.23) |
| VD 1 st | N (%) | 6123 (3.6) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Very preterm birth^b | | | | | |
| CD 1 st | N (%) | 377 (1.3) | 2.10 (1.84 to 2.33) | 1.33 (1.16 to 1.52) | 1.33 (1.16 to 1.52) |
| VD 1 st | N (%) | 1068 (0.6) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Postpartum haemorrhage | | | | | |
| CD 1 st | N (%) | 8601 (29) | 2.74 (2.67 to 2.82) | 2.27 (2.20 to 2.34) | 2.27 (2.20 to 2.34) |
| VD 1 st | N (%) | 22 441 (13) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Placenta previa | | | | | |
| CD 1 st | N (%) | 209 (0.7) | 2.59 (2.20 to 3.05) | 2.25 (1.89 to 2.68) | 2.25 (1.89 to 2.67) |
| VD 1 st | N (%) | 472 (0.3) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Placental abruption | | | | | |
| CD 1 st | N (%) | 188 (0.6) | 2.56 (2.16 to 3.04) | 2.26 (1.89 to 2.72) | 2.25 (1.87 to 2.70) |
| VD 1 st | N (%) | 429 (0.3) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Abnormal invasive placenta | | | | | |
| CD 1 st | N (%) | 91 (0.3) | 1.08 (0.87 to 1.36) | 0.92 (0.73 to 1.16) | 0.92 (0.73 to 1.16) |
| VD 1 st | N (%) | 489 (0.3) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Uterine rupture | | | | | |
| CD 1 st | N (%) | 150 (0.5) | 87.7 (46.2 to 166.4) | 81.3 (42.7 to 155.1) | 81.5 (42.8 to 155.4) |
| VD 1 st | N (%) | 10 (0.006) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |
| Preeclampsia | | | | | |
| CD 1 st | N (%) | 1249 (4.3) | 2.51 (2.34 to 2.68) | 1.53 (1.42 to 1.65) | 1.53 (1.42 to 1.65) |
| VD 1 st | N (%) | 2975 (1.7) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) |

*Adjusted maternal age, birth year, pregnancy related disorders (preeclampsia and diabetes), SGA, and congenital anomalies, uterine rupture, placenta previa, placental abruption in first pregnancy and the studied outcome in the first pregnancy (WITHOUT SMOKING).
 **Adjusted maternal age, birth year, pregnancy related disorders (preeclampsia and diabetes), SGA, smoking and congenital anomalies, uterine rupture, placenta previa, placental abruption in first pregnancy and the studied outcome in the first pregnancy.
^a138 (0.5%) deliveries with missing information on SGA in the caesarean group and 784 (0.5%) in the vaginal group
^b142 (0.5%) deliveries with missing information on GA in the caesarean group and 781 (0.5%) in the vaginal group.