**Supplementary table 1**: Odds ratio (OR) with 95% confidence intervals (CI) for adverse 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.

N   N   N   N   N   N   N   N   N   N	1 <sup>st</sup> birth		2 <sup>nd</sup> birth			
N   N   N   N   N   N   N   N   N   N		Antepartum still	lbirth	Crude OR (CI)	Adj OR (CI)*	Adj OR (CI) **
Intrapartum stillbirth   CD 1st   N (%)   8 (0.03)   1.29 (0.60 to 2.78)   1.29 (0.59 to 2.84)   1.28 (0.58 to 2.81     VD 1st   N (%)   36 (0.02)   1.0 (ref)   1.0 (ref)   1.0 (ref)     Stillbirth (Total)*	CD 1 <sup>st</sup>	N (%)	85 (0.3)	1.46 (1.15 to 1.85)	1.34 (1.04 to 1.72)	1.33 (1.04 to 1.71)
CD 1st N (%) 8 (0.03) 1.29 (0.60 to 2.78) 1.29 (0.59 to 2.84) 1.28 (0.58 to 2.81 VD 1st N (%) 36 (0.02) 1.0 (ref) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Stillbirth (Total)*  CD 1st N (%) 123 (0.4) 1.54 (1.27 to 1.89) 1.45 (1.18 to 1.79) 1.44 (1.17 to 1.78 VD 1st N (%) 464 (0.3) 1.0 (ref) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Perinatal mortality  CD 1st N (%) 154 (0.5) 1.45 (1.22 to 1.73) 1.37 (1.14 to 1.64) 1.36 (1.13 to 1.63 VD 1st N (%) 618 (0.4) 1.0 (ref) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Early neonatal mortality  CD 1st N (%) 31 (0.1) 1.17 (0.80 to 1.72) 1.05 (0.70 to 1.57) 1.05 (0.70 to 1.57 VD 1st N (%) 154 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Neonatal mortality  CD 1st N (%) 40 (0.1) 1.10 (0.78 to 1.54) 0.98 (0.69 to 1.39) 0.98 (0.69 to 1.40 VD 1st N (%) 212 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Cerebral palsy  CD 1st N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	VD 1 <sup>st</sup>	N (%)	339 (0.2)	1.0 (ref)	1.0 (ref)	1.0 (ref)
VD 1st N (%)       36 (0.02)       1.0 (ref)       1.0 (ref)         Stillbirth (Total)a         CD 1st N (%)       123 (0.4)       1.54 (1.27 to 1.89)       1.45 (1.18 to 1.79)       1.44 (1.17 to 1.78 to 1.78 to 1.78 to 1.79)         VD 1st N (%)       464 (0.3)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Perinatal mortality         CD 1st N (%)       154 (0.4)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Neonatal mortality         CD 1st N (%)       40 (0.1)       1.10 (ref)       1.0 (ref)       1.0 (ref)         Neonatal mortality         CD 1st N (%)       40 (0.1)       1.10 (ref)       1.0 (ref)       1.0 (ref)         Cerebral palsy         Col 1st N (%)       55 (0.2)       1.41 (1.05 to 1.89)       1.22 (0.89 to 1.66)       1.23 (0.90 to 1.67)		Intrapartum still	lbirth			
Stillbirth (Total) <sup>a</sup> CD 1 <sup>st</sup> N (%)         123 (0.4)         1.54 (1.27 to 1.89)         1.45 (1.18 to 1.79)         1.44 (1.17 to 1.78 to 1.78 to 1.78 to 1.78 to 1.78 to 1.0 (ref)           VD 1 <sup>st</sup> N (%)         464 (0.3)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Perinatal mortality           CD 1 <sup>st</sup> N (%)         154 (0.5)         1.45 (1.22 to 1.73)         1.37 (1.14 to 1.64)         1.36 (1.13 to 1.63 to 1.63 to 1.63 to 1.64 to 1.64)           VD 1 <sup>st</sup> N (%)         618 (0.4)         1.0 (ref)         1.0 (ref)         1.0 (ref)           CD 1 <sup>st</sup> N (%)         31 (0.1)         1.17 (0.80 to 1.72)         1.05 (0.70 to 1.57)         1.05 (0.70 to 1.57)           VD 1 <sup>st</sup> N (%)         31 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Neonatal mortality           CD 1 <sup>st</sup> N (%)         40 (0.1)         1.10 (0.78 to 1.54)         0.98 (0.69 to 1.39)         0.98 (0.69 to 1.40 to 1.40 to 1.54)           VD 1 <sup>st</sup> N (%)         212 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Cerebral palsy           CD 1 <sup>st</sup> N (%)         55 (0.2)         1.41 (1.05 to 1.89)         1.22 (0.89 to 1.66)         1.23 (0.90 to 1.67)	CD 1 <sup>st</sup>	N (%)	8 (0.03)	1.29 (0.60 to 2.78)	1.29 (0.59 to 2.84)	1.28 (0.58 to 2.81)
CD 1 <sup>st</sup> N (%)         123 (0.4)         1.54 (1.27 to 1.89)         1.45 (1.18 to 1.79)         1.44 (1.17 to 1.78           VD 1 <sup>st</sup> N (%)         464 (0.3)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Perinatal mortality           CD 1 <sup>st</sup> N (%)         154 (0.5)         1.45 (1.22 to 1.73)         1.37 (1.14 to 1.64)         1.36 (1.13 to 1.63)           VD 1 <sup>st</sup> N (%)         618 (0.4)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Early neonatal mortality           CD 1 <sup>st</sup> N (%)         31 (0.1)         1.17 (0.80 to 1.72)         1.05 (0.70 to 1.57)         1.05 (0.70 to 1.57)           VD 1 <sup>st</sup> N (%)         154 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Neonatal mortality           CD 1 <sup>st</sup> N (%)         40 (0.1)         1.10 (0.78 to 1.54)         0.98 (0.69 to 1.39)         0.98 (0.69 to 1.40)           VD 1 <sup>st</sup> N (%)         212 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Cerebral palsy	VD 1 <sup>st</sup>	N (%)	36 (0.02)	1.0 (ref)	1.0 (ref)	1.0 (ref)
VD 1 <sup>st</sup> N (%)         464 (0.3)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Perinatal mortality           CD 1 <sup>st</sup> N (%)         154 (0.5)         1.45 (1.22 to 1.73)         1.37 (1.14 to 1.64)         1.36 (1.13 to 1.63)           VD 1 <sup>st</sup> N (%)         618 (0.4)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Early neonatal mortality           CD 1 <sup>st</sup> N (%)         31 (0.1)         1.17 (0.80 to 1.72)         1.05 (0.70 to 1.57)         1.05 (0.70 to 1.57)           VD 1 <sup>st</sup> N (%)         154 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Neonatal mortality           CD 1 <sup>st</sup> N (%)         40 (0.1)         1.10 (0.78 to 1.54)         0.98 (0.69 to 1.39)         0.98 (0.69 to 1.40)           VD 1 <sup>st</sup> N (%)         212 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Cerebral palsy           CD 1 <sup>st</sup> N (%)         55 (0.2)         1.41 (1.05 to 1.89)         1.22 (0.89 to 1.66)         1.23 (0.90 to 1.67)		Stillbirth (Total)	a			
Perinatal mortality         CD 1 <sup>st</sup> N (%)       154 (0.5)       1.45 (1.22 to 1.73)       1.37 (1.14 to 1.64)       1.36 (1.13 to 1.63)         VD 1 <sup>st</sup> N (%)       618 (0.4)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Early neonatal mortality         CD 1 <sup>st</sup> N (%)       31 (0.1)       1.17 (0.80 to 1.72)       1.05 (0.70 to 1.57)       1.05 (0.70 to 1.57)         VD 1 <sup>st</sup> N (%)       154 (0.1)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Neonatal mortality         CD 1 <sup>st</sup> N (%)       40 (0.1)       1.10 (0.78 to 1.54)       0.98 (0.69 to 1.39)       0.98 (0.69 to 1.40)         VD 1 <sup>st</sup> N (%)       212 (0.1)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Cerebral palsy          CD 1 <sup>st</sup> N (%)       55 (0.2)       1.41 (1.05 to 1.89)       1.22 (0.89 to 1.66)       1.23 (0.90 to 1.67)	CD 1 <sup>st</sup>	N (%)	123 (0.4)	1.54 (1.27 to 1.89)	1.45 (1.18 to 1.79)	1.44 (1.17 to 1.78)
CD 1 <sup>st</sup> N (%) 154 (0.5) 1.45 (1.22 to 1.73) 1.37 (1.14 to 1.64) 1.36 (1.13 to 1.63 VD 1 <sup>st</sup> N (%) 618 (0.4) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Early neonatal mortality  CD 1 <sup>st</sup> N (%) 31 (0.1) 1.17 (0.80 to 1.72) 1.05 (0.70 to 1.57) 1.05 (0.70 to 1.57 VD 1 <sup>st</sup> N (%) 154 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Neonatal mortality  CD 1 <sup>st</sup> N (%) 40 (0.1) 1.10 (0.78 to 1.54) 0.98 (0.69 to 1.39) 0.98 (0.69 to 1.40 VD 1 <sup>st</sup> N (%) 212 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Cerebral palsy  CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	VD 1 <sup>st</sup>	N (%)	464 (0.3)	1.0 (ref)	1.0 (ref)	1.0 (ref)
VD 1 <sup>st</sup> N (%)         618 (0.4)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Early neonatal mortality           CD 1 <sup>st</sup> N (%)         31 (0.1)         1.17 (0.80 to 1.72)         1.05 (0.70 to 1.57)         1.05 (0.70 to 1.57)           VD 1 <sup>st</sup> N (%)         154 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Neonatal mortality           CD 1 <sup>st</sup> N (%)         40 (0.1)         1.10 (0.78 to 1.54)         0.98 (0.69 to 1.39)         0.98 (0.69 to 1.40)           VD 1 <sup>st</sup> N (%)         212 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Cerebral palsy           CD 1 <sup>st</sup> N (%)         55 (0.2)         1.41 (1.05 to 1.89)         1.22 (0.89 to 1.66)         1.23 (0.90 to 1.67)		Perinatal mortality				
Early neonatal mortality  CD 1 <sup>st</sup> N (%) 31 (0.1) 1.17 (0.80 to 1.72) 1.05 (0.70 to 1.57) 1.05 (0.70 to 1.57)  VD 1 <sup>st</sup> N (%) 154 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Neonatal mortality  CD 1 <sup>st</sup> N (%) 40 (0.1) 1.10 (0.78 to 1.54) 0.98 (0.69 to 1.39) 0.98 (0.69 to 1.40 VD 1 <sup>st</sup> N (%) 212 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Cerebral palsy  CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	CD 1 <sup>st</sup>	N (%)	154 (0.5)	1.45 (1.22 to 1.73)	1.37 (1.14 to 1.64)	1.36 (1.13 to 1.63)
CD 1 <sup>st</sup> N (%) 31 (0.1) 1.17 (0.80 to 1.72) 1.05 (0.70 to 1.57) 1.05 (0.70 to 1.57)  VD 1 <sup>st</sup> N (%) 154 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Neonatal mortality  CD 1 <sup>st</sup> N (%) 40 (0.1) 1.10 (0.78 to 1.54) 0.98 (0.69 to 1.39) 0.98 (0.69 to 1.40)  VD 1 <sup>st</sup> N (%) 212 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Cerebral palsy  CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	VD 1 <sup>st</sup>	N (%)	618 (0.4)	1.0 (ref)	1.0 (ref)	1.0 (ref)
VD 1 <sup>st</sup> N (%)         154 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Neonatal mortality           CD 1 <sup>st</sup> N (%)         40 (0.1)         1.10 (0.78 to 1.54)         0.98 (0.69 to 1.39)         0.98 (0.69 to 1.40           VD 1 <sup>st</sup> N (%)         212 (0.1)         1.0 (ref)         1.0 (ref)         1.0 (ref)           Cerebral palsy           CD 1 <sup>st</sup> N (%)         55 (0.2)         1.41 (1.05 to 1.89)         1.22 (0.89 to 1.66)         1.23 (0.90 to 1.67)		Early neonatal mortality				
Neonatal mortality         CD 1 <sup>st</sup> N (%)       40 (0.1)       1.10 (0.78 to 1.54)       0.98 (0.69 to 1.39)       0.98 (0.69 to 1.40         VD 1 <sup>st</sup> N (%)       212 (0.1)       1.0 (ref)       1.0 (ref)       1.0 (ref)         Cerebral palsy         CD 1 <sup>st</sup> N (%)       55 (0.2)       1.41 (1.05 to 1.89)       1.22 (0.89 to 1.66)       1.23 (0.90 to 1.67)	CD 1 <sup>st</sup>	N (%)	31 (0.1)	1.17 (0.80 to 1.72)	1.05 (0.70 to 1.57)	1.05 (0.70 to 1.57)
CD 1 <sup>st</sup> N (%) 40 (0.1) 1.10 (0.78 to 1.54) 0.98 (0.69 to 1.39) 0.98 (0.69 to 1.40 VD 1 <sup>st</sup> N (%) 212 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)  Cerebral palsy  CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	VD 1 <sup>st</sup>	N (%)	154 (0.1)	1.0 (ref)	1.0 (ref)	1.0 (ref)
VD 1 <sup>st</sup> N (%)     212 (0.1)     1.0 (ref)     1.0 (ref)     1.0 (ref)       Cerebral palsy       CD 1 <sup>st</sup> N (%)     55 (0.2)     1.41 (1.05 to 1.89)     1.22 (0.89 to 1.66)     1.23 (0.90 to 1.67)		Neonatal mortality				
Cerebral palsy  CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67)	CD 1 <sup>st</sup>	N (%)	40 (0.1)	1.10 (0.78 to 1.54)	0.98 (0.69 to 1.39)	0.98 (0.69 to 1.40)
CD 1 <sup>st</sup> N (%) 55 (0.2) 1.41 (1.05 to 1.89) 1.22 (0.89 to 1.66) 1.23 (0.90 to 1.67	VD 1 <sup>st</sup>	N (%)	212 (0.1)	1.0 (ref)	1.0 (ref)	1.0 (ref)
		Cerebral palsy				
VD 1 <sup>st</sup> N (%) 227 (0.1) 1.0 (ref) 1.0 (ref) 1.0 (ref)	CD 1 <sup>st</sup>	N (%)	55 (0.2)	1.41 (1.05 to 1.89)	1.22 (0.89 to 1.66)	1.23 (0.90 to 1.67)
	VD 1 <sup>st</sup>	N (%)	227 (0.1)	1.0 (ref)	1.0 (ref)	1.0 (ref)

<sup>\*</sup>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

<sup>\*\*</sup>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.

aincluding stillbirths with unknown timing of death.