

S14 Table. GDM prevalence, pre-specified maternal outcomes in the modified per protocol population and subgroup discordant for definition of GDM

| | Modified per protocol population | | | | | | Subgroup discordant for definition of GDM * | | | | | |
|--|----------------------------------|------------------------------|--|---|--|---|---|---|-------|-------------|---|---|
| | SWE-GDM criteria (n=22 757) | WHO-2013 criteria (n=21 886) | WHO-2013 vs SWE-GDM | | SWE-GDM criteria (n=956) | WHO-2013 criteria (n=1 195) | WHO-2013 vs SWE-GDM | | | | | |
| | | | Adjusted 1 [†] RR (95% CI) | Adjusted 2 MI [‡] RR (95% CI) | | | Adjusted 1 [†] RR (95% CI) | Adjusted 2 MI [‡] RR (95% CI) | | | | |
| GDM prevalence | 22 757 | 587 (2.6) | 21 886 | 1 485 (6.8) | 2.48 (1.98-3.11) P<0.001 | 2.45 (1.94-3.11) P<0.001 | 956 | 0 (0.0) | 1 195 | 1 195 (100) | NA | NA |
| Secondary outcomes | | | | | | | | | | | | |
| Composite maternal outcome | 22 757 | 2 709 (11.9) | 21 886 | 2 473 (11.3) | 0.95 (0.89-1.02) P [†] =0.19 | 0.96 (0.91-1.02) P [‡] =0.21 | 956 | 144 (15.1) | 1 195 | 138 (11.5) | 0.76 (0.61-0.95) P [†] =0.018 | 0.78 (0.66-0.94) P [‡] =0.007 |
| Shoulder dystocia | 22 757 | 59 (0.26) | 21 886 | 38 (0.17) | 0.46 (0.28-0.76) P [†] =0.002 | 0.45 (0.28-0.72) P [‡] <0.001 | 956 | 4 (0.42) | 1 195 | 3 (0.25) | NA | NA |
| Perineal trauma (3 rd and 4 th degree) | 22 757 | 521 (2.3) | 21 886 | 446 (2.0) | 0.78 (0.67-0.90) P [†] <0.001 | 0.78 (0.67-0.90) P [‡] <0.001 | 956 | 18 (1.9) | 1 195 | 20 (1.7) | 0.79 (0.48-1.29) P [†] =0.34 | NA |
| Postpartum haemorrhage (\geq 1000 ml) | 22 757 | 2 263 (9.9) | 21 886 | 2 078 (9.5) | 1.00 (0.92-1.09) P [†] =0.97 | 1.00 (0.93-1.08) P [‡] =0.94 | 956 | 128 (13.4) | 1 195 | 122 (10.2) | 0.76 (0.58-0.99) P [†] =0.042 | 0.79 (0.64-0.97) P [‡] =0.026 |
| Treatment during pregnancy | | | | | | | | | | | | |
| Diet only | 22 757 | 264 (1.2) | 21 886 | 822 (3.8) | 3.35 (2.68-4.18) P [†] <0.001 | 3.33 (2.66-4.17) P [‡] <0.001 | 956 | 10 (1.0) | 1 195 | 625 (52.3) | 54.2 (27.6-107) P [†] <0.001 | 55.4 (28.6-107) P [‡] <0.001 |
| Metformin only | 22 757 | 203 (0.89) | 21 886 | 416 (1.9) | 1.72 (1.34-2.19) P [†] <0.001 | 1.67 (1.29-2.17) P [‡] <0.001 | 956 | 0 (0.0) | 1 195 | 345 (28.9) | NA | NA |
| Insulin only | 22 757 | 37 (0.16) | 21 886 | 75 (0.34) | 1.40 (0.94-2.09) P [†] =0.097 | 1.39 (0.96-2.02) P [‡] =0.084 | 956 | 0 (0.0) | 1 136 | 59 (4.9) | NA | NA |
| Metformin and insulin | 21 886 | 188 (0.86) | 22 757 | 109 (0.48) | 1.87 (1.15-3.04) P [†] =0.012 | 1.77 (1.09-2.87) P [‡] =0.020 | 956 | 0 (0.0) | 1 195 | 159 (13.3) | NA | NA |
| Gestational hypertension [§] | 22 594 | 648 (2.9) | 21 733 | 721 (3.3) | 1.01 (0.72-1.40) P [†] =0.95 | 1.06 (0.75-1.49) P [‡] =0.75 | 933 | 50 (5.4) | 1 178 | 78 (6.6) | 1.27 (0.87-1.84) P [†] 0.21 | 1.37 (1.01-1.86) P [‡] =0.046 |
| Preeclampsia [¶] | 22 757 | 564 (2.5) | 21 886 | 612 (2.8) | 1.07 (0.85-1.35) P [†] =0.55 | 1.14 (0.89-1.47) P [‡] =0.28 | 956 | 37 (3.9) | 1 195 | 65 (5.4) | 1.36 (1.01-1.84) P [†] =0.043 | 1.60 (1.13-2.26) P [‡] =0.008 |
| Gestational weight gain (kg)** | 21 044 | 12.1 (5.6) | 20 360 | 12.1 (5.8) | -0.3 (-0.4 to -0.2) P [†] <0.001 | -0.3(-0.4 to -0.2) P [‡] <0.001 | 820 | 11.2 (6.9) | 1 071 | 9.5 (6.6) | -1.6(-2.3 to -1.0) P [†] <0.001 | -1.5(-2.1 to -0.9) P [‡] <0.001 |
| Caesarean section | 22 757 | 4 018 (17.7) | 21 886 | 3 837 (17.5) | 1.01 (0.97-1.06) P [†] =0.53 | 1.02 (0.98-1.07) P [‡] =0.35 | 956 | 255 (26.7) | 1 195 | 309 (25.9) | 0.94 (0.79-1.11) P [†] =0.44 | 0.92 (0.76-1.11) P [‡] =0.38 |
| Emergency caesarean section | 22 757 | 2 973 (13.1) | 21 886 | 2 830 (12.9) | 1.02 (0.97-1.08) P [†] =0.37 | 1.02 (0.95-1.09) P [‡] =0.60 | 956 | 187 (19.6) | 1 195 | 212 (17.7) | 0.91 (0.72-1.14) P [†] =0.41 | 0.90 (0.70-1.16) P [‡] =0.42 |
| Elective caesarean section | 22 757 | 1 045 (4.6) | 21 886 | 1 007 (4.6) | 0.99 (0.92-1.05) P [†] =0.71 | 0.99 (0.93-1.06) P [‡] =0.83 | 956 | 68 (7.1) | 1 195 | 97 (8.1) | 1.06 (0.70-1.61) P [†] =0.78 | 1.02 (0.65-1.60) P [‡] =0.91 |
| Instrumental delivery | 22 757 | 1 143 (5.0) | 21 886 | 1 049 (4.8) | 0.99 (0.90-1.10) P [†] =0.86 | 1.00 (0.90-1.12) P [‡] =0.94 | 956 | 31 (3.2) | 1 195 | 43 (3.6) | 1.07 (0.60-1.88) P [†] =0.82 | 1.11 (0.63-1.96) P [‡] =0.72 |
| Induction of labour | 22 757 | 4 574 (20.1) | 21 886 | 4 361 (19.9) | 0.95 (0.91-1.00) P [†] =0.055 | 0.96 (0.91-1.00) P [‡] =0.056 | 956 | 306 (32.0) | 1 195 | 433 (36.2) | 0.99 (0.82-1.20) P [†] =0.91 | 1.03 (0.83-1.27) P [‡] =0.81 |
| Hospital stay (from delivery to discharge) | 22 753 | 2.52 (1.68) | 21 883 | 2.49 (1.83) | 1.00 (0.98-1.02) P [†] =0.93 | 1.01 (0.97-1.03) P [‡] =0.95 | 956 | 2.77 (1.76) | 1 195 | 3.07 (2.04) | 1.04 (0.95-1.14) P [†] =0.40 | 1.05 (0.94-1.19) P [‡] =0.38 |

| | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Moderate / high (score 5-10) | | | | | Reference | Reference | | | | Reference | Reference |
| Low (score 1-4) | | | | | 0.94 (0.79-1.13) P ^t =0.51 | 0.95 (0.80-1.13) P ^t =0.53 | | | | 1.07 (0.55-2.06) P ^t =0.84 | 1.12 (0.56-2.23) P ^t =0.75 |

Data are n (%) or mean (SD). CI=confidence interval. GDM=gestational diabetes mellitus. MI=multiple imputation. NA=not applicable. RR=relative risk ratio.

*The cohort of women with fasting and 2-hour plasma glucose cut off between the WHO-2013 criteria and SWE-GDM criteria (fasting plasma glucose 5.1-6.9 and/or 2-hour plasma glucose 8.5-8.8/8.9/9.9 mmol/L, untreated before and treated after the switch).

^tAnalysed with multilevel mixed model adjusted for centre as random factor and period (January-March, April-June, July-September, October-December) as fixed factor. Mixed Poisson model for binary outcomes (gives relative risk ratios for relative risk associations), mixed multi-nominal for categorical outcomes (gives odds ratios as association measures), mixed linear model for continuous outcomes (gives mean differences as association measures), and mixed negative binomial model for count data (gives mean ratios as association measures).

[†]Adjusted for mother's age modeled by a linear, squared, and cubic term, chronic hypertension, smoking, snuff, country of birth, and parity. Multiple imputation used for missing data on potential confounding variables

.[§] Blood pressure $\geq 140/90$ mmHg, measured two times with at least 4 hour interval during pregnancy after gestational week 20.

.[¶]Blood pressure $\geq 140/90$ mmHg and newly onset proteinuria ≥ 300 mg/24 hours after gestational week 20.

**Adjusted for weight at first visit.