## S17 Table. Primary outcome and pre-specified neonatal outcomes in the intention to treat population

|  | Intention to treat population |              |                         |                         |  |
|--|-------------------------------|--------------|-------------------------|-------------------------|--|
|  | SWE-GDM                       | WHO-2013     | WHO-2013 vs SWE-GDM     |                         |  |
|  | criteria                      | criteria     | Adjusted 1 <sup>†</sup> | Adjusted 2 <sup>‡</sup> |  |
|  | (n=29 349)                    | (n=29 034)   | RR (95% CI)             | RR (95% CI)             |  |
| Primary outcome  |                               |              |                         |                         |  |
| Large for gestational age (>90 <sup>th</sup> percentile) <sup>§[1]</sup> | 3 407 (11.7)                  | 3 382 (11.7) | 1.00 (0.93-1.08)        | 1.00 (0.93-1.08)        |  |
| Large for gestational age (>90 <sup>th</sup> percentile) <sup>s(1)</sup> | 3 407 (11.7)                  | 5 562 (11.7) |                         |                         |  |
|  |                               |              | P <sup>†</sup> =0.99    | P*=0.92                 |  |
| Secondary neonatal outcome   |                               |              |                         |                         |  |
| Composite neonatal outcome   | 365 (1.2)                     | 447 (1.5)    | 1.11 (0.95-1.31)        | 1.12 (0.96-1.31)        |  |
|  |                               |              | P <sup>†</sup> =0.19    | P <sup>‡</sup> =0.15    |  |
| Respiratory distress   | 183 (0.62)                    | 250 (0.86)   | 1.39 (1.10-1.75)        | 1.41 (1.11-1.78)        |  |
|  |                               |              | P <sup>†</sup> =0.005   | P <sup>‡</sup> =0.004   |  |
| Spinal cord injury   | 1 (0.00)                      | 2 (0.01)     | NA                      | NA                      |  |
| Peripheral nerve / brachial plexus injury                                | 21 (0.07)                     | 24 (0.08)    | 1.16 (0.71-1.90)        | NA                      |  |
|  |                               |              | P <sup>†</sup> =0.54    |                         |  |
| Basal/depressed skull fracture   | 0 (0.0)                       | 0 (0.0)      | NA                      | NA                      |  |
| Clavicular fracture  | 40 (0.14)                     | 37 (0.13)    | 0.69 (0.34-1.39)        | 0.71 (0.34-1.47)        |  |
|  |                               |              | P <sup>†</sup> =0.30    | P <sup>‡</sup> =0.36    |  |
| Long bone fracture   | 5 (0.02)                      | 0 (0.0)      | NA                      | NA                      |  |
| Cranial haemorrhage  | 48 (0.16)                     | 64 (0.22)    | 1.52 (1.10-2.11)        | 1.58 (1.14-2.20)        |  |
|  |                               |              | P <sup>†</sup> =0.011   | P <sup>‡</sup> =0.006   |  |
| Stillbirth (≥22 gestational weeks) or                                    | 96 (0.33)                     | 115 (0.40)   | 0.83 (0.61-1.12)        | 0.84 (0.61-1.15)        |  |
| neonatal death (day 0-28)  |                               |              | P <sup>†</sup> =0.23    | P <sup>‡</sup> =0.27    |  |
| Need of therapeutic cooling  | 25 (0.09)                     | 31 (0.11)    | 1.24 (0.48-3.21)        | NA                      |  |
|  |                               |              | P <sup>†</sup> =0.65    |                         |  |
| Preterm birth (<37 weeks)  | 1 275 (4.3)                   | 1 397 (4.8)  | 1.02 (0.93-1.12)        | 1.03 (0.93-1.15)        |  |
|  |                               |              | P <sup>†</sup> =0.61    | P <sup>‡</sup> =0.55    |  |
| Small for gestational age (<10 <sup>th</sup> percentile) <sup>§[1]</sup> | 3 185 (10.9)                  | 3 220 (11.1) | 0.97 (0.91-1.04)        | 0.98 (0.91-1.05)        |  |
|  |                               |              | P <sup>†</sup> =0.43    | P <sup>‡</sup> =0.53    |  |
| Exploratory neonatal outcomes  |                               |              |                         |                         |  |
| Macrosomia (birthweight ≥4500g) <sup>§</sup>                             | 862 (2.9)                     | 785 (2.7)    | 0.81 (0.71-0.93)        | 0.83 (0.72-0.95)        |  |
|  |                               |              | P <sup>†</sup> =0.002   | P <sup>‡</sup> =0.008   |  |
| Large for gestational age (>2 SD) §[1]                                   | 1 345 (4.6)                   | 1 281 (4.4)  | 0.93 (0.84-1.02)        | 0.93 (0.85-1.02)        |  |
|  |                               |              | P <sup>†</sup> =0.11    | P <sup>‡</sup> =0.14    |  |

| Small for gestational age (<2 SD) §[1] | 828 (2.8)    | 919 (3.2)    | 1.01 (0.84-1.21)       | 1.01 (0.83-1.22)       |
|--|--------------|--------------|------------------------|------------------------|
|  |              |              | P <sup>†</sup> =0.89   | P <sup>‡</sup> =0.93   |
| Birthweight (g)§                       | 3 528 (531)  | 3 513 (546)  | -15 (-28 to -79)       | -14 (-30 to 2)         |
|  |              |              | P <sup>†</sup> =0.038  | P <sup>‡</sup> =0.088  |
| Birth length (cm) <sup>¶</sup>         | 50.2 (2.4)   | 50.2 (2.4)   | -0.06 (-0.11 to -0.01) | -0.05 (-0.10 to -0.00) |
|  |              |              | P <sup>†</sup> =0.012  | P*=0.046               |
| Gestational age (days)                 | 278.0 (12.2) | 277.6 (12.9) | -0.34 (-0.57 to -0.11) | -0.34 (-0.58 to -0.10) |
|  |              |              | P <sup>†</sup> =0.003  | P*=0.006               |

Data are n (%) or mean (SD). Effect measures as relative risk for binary variables or mean differences for continuous variables (95% CI). RR=relative risk ratio. CI=confidence interval. GDM=gestational diabetes mellitus. MI=multiple imputation. NA= not applicable. NICU=neonatal intensive care unit.

Analysed 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 as association measures), 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 modelled 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.

<sup>§</sup>In the intention to treat population there were missing values for 122 neonates in the SWE-GDM group and for 106 in the WHO-2013

group. <sup>1</sup> In the intention to treat population there were missing values for 311 neonates in the SWE-GDM group and for 272 in the WHO-2013 group.

1. Maršál K, Persson PH, Larsen T, Lilja H, Selbing A, Sultan B. Intrauterine growth curves based on ultrasonically estimated foetal weights. Acta Paediatr. 1996;85(7):843-8.