**Supplementary Table 1**

Logistic regression analysis (enter method) to determine the risk factors for macrosomia in matched case-control study

|  |  |  |
| --- | --- | --- |
|  | *OR* | *P* |
| Tertiles of neutrophils (× 109/L) |  |  |
| Lowest | Reference |  |
| Middle | 1.90 (0.43 to 8.33) | 0.394 |
| Highest | 4.09 (1.04 to 16.13) | **0.044** |
| Age (years) | 1.05 (0.96 to 1.15) | 0.293 |
| Pre-pregnancy BMI (kg/m2) | 1.31 (1.31 to 1.52) | **< 0.001** |
| Weight gain (whole pregnancy) (kg) | 1.10 (1.01 to 1.20) | **0.035** |
| HbA1c (%) | 1.60 (0.51 to 5.00) | 0.418 |
| Tertiles of WBC (× 109/L) |  |  |
| Lowest | Reference |  |
| Middle | 0.79 (0.24 to 2.64) | 0.698 |
| Highest | 1.73 (0.57 to 5.21) | 0.333 |
| Age (years) | 1.05 (0.96 to 1.15) | 0.328 |
| Pre-pregnancy BMI (kg/m2) | 1.32 (1.14 to 1.53) | **< 0.001** |
| Weight gain (whole pregnancy) (kg) | 1.10 (1.00 to 1.20) | **0.039** |
| HbA1c (%) | 1.88 (0.62 to 5.71) | 0.264 |
| Tertiles of NLR |  |  |
| Lowest | Reference |  |
| Middle | 1.04 (0.30 to 3.62) | 0.200 |
| Highest | 2.81 (0.93 to 8.56) | 0.069 |
| Age (years) | 1.07 (0.97 to 1.17) | 0.193 |
| Pre-pregnancy BMI (kg/m2) | 1.32 (1.14 to 1.52) | **< 0.001** |
| Weight gain (whole pregnancy) (kg) | 1.09 (1.00 to 1.19) | 0.054 |
| HbA1c (%) | 1.93 (0.59 to 6.30) | 0.279 |

WBC, white blood cell; NLR, neutrophil-to-lymphocyte

**Supplementary Table 2**

Multivariate linear regression analysis to determine the factors associated with pre-pregnancy BMI, HOMA-IR and newborn weight

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variables |  unstandardized B-coefficient | SE | standardized B-coefficient | *P* |
| Pre-pregnancy BMI (*n* = 754)① |  |  |  |  |
| Neutrophil count (🞨 109/L) | 0.29  | 0.06 | 0.16 | **<0.001** |
| TG (mmol/L) | 0.07 | 0.07 | 0.03 | 0.357 |
| Parity | 0.81 | 0.28 | 0.11 | **0.004** |
| Age (years) | 0.07 | 0.03 | 0.11 | **0.005** |
| HOMA-IR (*n* = 336)\*② |  |  |  |  |
| Neutrophil count (🞨 109/L) | 0.04 | 0.02 | 0.10 | **0.045** |
| Pre-pregnancy BMI (kg/m2) | 0.07 | 0.01 | 0.36 | **< 0.001** |
| TG (mmol/L) | 0.11 | 0.03 | 0.21 | **< 0.001** |
| Weight gain prior to GDM diagnosed (kg) | 0.02 | 0.01 | 0.07 | 0.192 |
| Newborn weight (*n* = 1025)③ |  |  |  |  |
| Neutrophil count (🞨 109/L) | 11.60 | 8.43 | 0.04 | 0.169  |
| FBG (mmol/L) | 12.46 | 13.95 | 0.03 | 0372 |
| Pre-pregnancy BMI (kg/m2) | 35.40 | 4.57 | 0.24 | **< 0.001** |
| Age (years) | 7.07 | 2.93 | 0.07 | **0.016** |
| Weight gain (whole pregnancy) (kg) | 23.49 | 2.96 | 0.24 | **< 0.001** |

SE, standard error; \*Log transformed for analysis

Enter method was used for multivariate linear regression analysis. ①: Adjusted for age, parity (women were divided into nulliparous and parous), triglyceride. F (4, 749) = 10.92 (*P* < 0.001), adjusted *R*2 = 0.05; ②: Adjusted for pre-pregnancy BMI, TG. Weight gain prior to GDM diagnosed. F (4, 332) = 20.23 (*P* < 0.001), adjusted *R*2 = 0.19; ③: Adjusted for FBG, pre-pregnancy BMI, age, weight gain during the whole pregnancy. F (5, 1020) = 24.12 (*P* < 0.001), adjusted *R*2 = 0.103