Supplementary Table 1. Characteristics of the study population between the first and second pregnancy

| Characteristics                  | 1st pregnancy | 2nd pregnancy | T/χ²  | P-value |
|----------------------------------|---------------|---------------|-------|---------|
|                                  | Mean ± SD/N (%) | Mean ± SD/N (%) |       |         |
| Age                              | 28.37 ± 3.22  | 31.91 ± 3.40  | 197.15 | <0.001  |
| Age ≥35 years                    | 193 (3.1%)    | 1253 (20.2%)  | 5242.67 | <0.001  |
| Pre-pregnancy weight (kg)        | 57.08 ± 8.72  | 58.81 ± 9.20  | -19.66 | <0.001  |
| Height (cm)                      | 162.50 ± 4.86 |               |       |         |
| Pre-pregnancy BMI                | 21.58 ± 3.11  | 22.25 ± 3.26  | -19.91 | <0.001  |
| Pre-pregnancy BMI ≥28 kg/m²      | 183 (3.5%)    | 280 (5.4%)    | 3802.25 | <0.001  |
| Pre-pregnancy BMI 24–28 kg/m²    | 831 (16.0%)   | 1036 (20.2%)  |       |         |
| Area under the curve of OGTT     | 13.26 ± 2.12  | 13.41 ± 2.26  | 5.78  | <0.001  |
| FPG ≥5.6 in OGTT                 | 112 (2.1%)    | 171 (2.8%)    | 163.86 | <0.001  |
| Two or more abnormal OGTT value  | 302 (5.5%)    | 467 (7.5%)    | 409.55 | <0.001  |
| OGTT-fasting                     | 4.53 ± 0.46   | 4.56 ± 0.50   | -6.81 | <0.001  |
| OGTT-1 h                         | 7.72 ± 1.58   | 7.81 ± 1.67   | 4.45  | <0.001  |
| OGTT-2 h                         | 6.57 ± 1.25   | 6.66 ± 1.31   | -4.75 | <0.001  |
| Birth weight                     | 3342 ± 468    | 3372 ± 453    | 5.06  | <0.001  |
| Delivered weeks                  | 39.09 ± 1.55  | 38.66 ± 1.42  | 19.64 | <0.001  |
| GDM                              | 1002 (16.2%)  | 1327 (21.4%)  | 608.75 | <0.001  |
| PTB                              | 293 (4.8%)    | 319 (5.2%)    | 155.74 | <0.001  |
| Macrosomia                       | 446 (7.3%)    | 470 (7.6%)    | 259.37 | <0.001  |

BMI: Body mass index; FPG: Fasting plasma glucose; GDM: Gestational diabetes
mellitus; OGTT: Oral glucose tolerance test; PTB: Preterm birth; SD: Standard deviation.