**Supplementary Table 1. Parameters estimates of linear mixed models assessing associations between gestational diabetes mellitus and longitudinal change rate in estimated fetal weight (g) of twin pregnancies.**

| **Parameters** | **Categories** | **β (95% CI) a** | ***P* value** |
| --- | --- | --- | --- |
| Intercept | NA | 315.22 (239.84, 390.60) | <0.001 |
| Gestational diabetes mellitus | Yes | -4.13 (-22.39, 14.14) | 0.658 |
|  | No | 0 [Reference] | NA |
| Gestational week | NA | 156.50 (148.20, 164.79) | <0.001 |
| Gestational diabetes mellitus ×Gestational week | Yes | 4.36 (1.25, 7.48) | 0.008 |
|  | No | 0 [Reference] | NA |
| Fetal chorionicity | Monochorionic diamnionicity | 0 [Reference] | NA |
|  | Dichorionic diamnionity | 30.75 (15.14, 46.36) | <0.001 |
| Neonatal sex | Male | 24.85 (13.81, 35.89) | <0.001 |
|  | Female | 0 [Reference] | NA |
| In-vitro fertilization | Yes | 26.61 (13.95, 39.27) | <0.001 |
|  | No | 0 [Reference] | NA |
| Age | NA | -0.302 (-1.80, 1.20) | 0.693 |
| BMI | NA | 1.510 (-0.26, 3.28) | 0.094 |
| Oral glucose tolerance test 1h | NA | 4.023 (-1.74, 9.78) | 0.171 |
| Oral glucose tolerance test 2h | NA | -1.920 (-8.35, 4.51) | 0.559 |

NA, not applicable; CI, confidence interval.

a β and 95% confidence interval were estimated using linear mixed models, controlling for correlated repeated measurements and cluster the correlation within twin pairs, by using a 2-level nested structure. Adjusted covariates included maternal age, BMI, mode of conception, OGTT results fetal chorionicity and neonatal sex.