**Additional file 2**

**Table A2.** Maternal predictors of male fetal anthropometric parameters in univariate analyses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Fetal Anthropometric Parameters | Maternal Predictors | OR/  Beta-Coefficient†† | Standard Error | 95% CI | | *p- value* |
| Fetal weight centile (%) \* | Age (years) | 0.18†† | 0.42 | -0.65 | 1.01 | 0.662 |
| Ethnicity (low/high risk) | 1.85†† | 4.52 | -7.12 | 10.82 | 0.683 |
| Prepregnancy BMI (kg/m2) | 1.23†† | 0.36 | 0.52 | 1.95 | 0.001 |
| Gestational weight gain (kg) | 0.51†† | 0.31 | -0.11 | 1.14 | 0.105 |
| Gestational weight gain (kg) until the 1st GDM visit | 0.76†† | 0.38 | 0.01 | 1.51 | 0.048 |
| Excessive weight gain until the 1st GDM visit† | 9.62†† | 5.08 | -0.47 | 19.72 | 0.062 |
| Fasting oGTT glucose (mmol/L) | -0.63†† | 4.18 | -8.93 | 7.67 | 0.880 |
| 1-h oGTT glucose (mmol/L) | 1.79†† | 1.25 | -0.71 | 4.29 | 0.158 |
| 2-h oGTT glucose (mmol/L) | -0.32†† | 1.35 | -3.01 | 2.38 | 0.815 |
| HbA1c at the 1st GDM visit (%/mmol/mol) | 4.45†† | 5.18 | -5.84 | 14.74 | 0.392 |
| Medical treatment requirement | 12.07†† | 4.32 | 3.49 | 20.64 | 0.006 |
| Fetal weight centile >90 (%) \* | Age (years) | 1.06 | 0.06 | 0.95 | 1.18 | 0.298 |
| Ethnicity (low/high risk) | 1.21 | 0.73 | 0.37 | 3.92 | 0.751 |
| Prepregnancy BMI (kg/m2) | 1.14 | 0.06 | 1.03 | 1.25 | 0.009 |
| Gestational weight gain (kg) | 1.07 | 0.04 | 0.99 | 1.16 | 0.073 |
| Gestational weight gain (kg) until the 1st GDM visit | 1.08 | 0.06 | 0.97 | 1.19 | 0.159 |
| Excessive weight gain until the 1st GDM visit† | 1.18 | 0.83 | 0.30 | 4.67 | 0.811 |
| Fasting oGTT glucose (mmol/L) | 1.28 | 0.65 | 0.47 | 3.45 | 0.633 |
| 1-h oGTT glucose (mmol/L) | 1.29 | 0.23 | 0.91 | 1.82 | 0.150 |
| 2-h oGTT glucose (mmol/L) | 0.95 | 0.17 | 0.68 | 1.34 | 0.769 |
| HbA1c at the 1st GDM visit (%/mmol/mol) | 1.70 | 1.17 | 0.45 | 6.54 | 0.435 |
| Medical treatment requirement | 2.50 | 1.73 | 0.64 | 9.72 | 0.186 |
| Fetal abdominal circumference centile (%) \* | Age (years) | 0.65†† | 0.61 | -0.55 | 1.86 | 0.286 |
| Ethnicity (low/high risk) | 2.81†† | 6.60 | -10.30 | 15.92 | 0.672 |
| Prepregnancy BMI (kg/m2) | 1.56†† | 0.54 | 0.48 | 2.64 | 0.005 |
| Gestational weight gain (kg) | 0.51†† | 0.46 | -0.40 | 1.43 | 0.269 |
| Gestational weight gain (kg) until the 1st GDM visit | 0.78†† | 0.57 | -0.36 | 1.91 | 0.177 |
| Excessive weight gain until the 1st GDM visit† | 8.89†† | 7.51 | -6.04 | 23.81 | 0.240 |
| Fasting oGTT glucose (mmol/L) | -0.53†† | 6.09 | -12.63 | 11.57 | 0.931 |
| 1-h oGTT glucose (mmol/L) | 2.42†† | 1.85 | -1.26 | 6.10 | 0.194 |
| 2-h oGTT glucose (mmol/L) | -0.98†† | 1.95 | -4.87 | 2.91 | 0.618 |
| HbA1c at the 1st GDM visit (%/mmol/mol) | 6.74†† | 7.68 | -8.52 | 22.00 | 0.383 |
| Medical treatment requirement | 13.58†† | 6.54 | 0.58 | 26.58 | 0.041 |
| Fetal abdominal circumference centile >90 (%) \* | Age (years) | 1.05 | 0.05 | 0.97 | 1.15 | 0.230 |
| Ethnicity (low/high risk) | 1.01 | 0.47 | 0.41 | 2.52 | 0.980 |
| Prepregnancy BMI (kg/m2) | 1.05 | 0.04 | 0.98 | 1.14 | 0.175 |
| Gestational weight gain (kg) | 1.06 | 0.04 | 0.99 | 1.13 | 0.074 |
| Gestational weight gain (kg) until the 1st GDM visit | 1.09 | 0.05 | 1.00 | 1.19 | 0.050 |
| Excessive weight gain until the 1st GDM visit† | 2.19 | 1.32 | 0.67 | 7.15 | 0.196 |
| Fasting oGTT glucose (mmol/L) | 0.94 | 0.39 | 0.41 | 2.12 | 0.877 |
| 1-h oGTT glucose (mmol/L) | 1.17 | 0.16 | 0.90 | 1.54 | 0.243 |
| 2-h oGTT glucose (mmol/L) | 0.85 | 0.12 | 0.63 | 1.13 | 0.259 |
| HbA1c at the 1st GDM visit (%/mmol/mol) | 1.46 | 0.80 | 0.50 | 4.25 | 0.492 |
| Medical treatment requirement | 2.78 | 1.47 | 0.98 | 7.85 | 0.054 |
| Fetal abdominal circumference centile <10 (%) \* | Age (years) | 0.94 | 0.06 | 0.82 | 1.07 | 0.358 |
| Ethnicity (low/high risk) | 0.43 | 0.36 | 0.08 | 2.25 | 0.317 |
| Prepregnancy BMI (kg/m2) | 0.90 | 0.07 | 0.77 | 1.06 | 0.195 |
| Gestational weight gain (kg) | 1.01 | 0.05 | 0.92 | 1.12 | 0.775 |
| Gestational weight gain (kg) until the 1st GDM visit | 1.01 | 0.07 | 0.88 | 1.16 | 0.873 |
| Excessive weight gain until the 1st GDM visit† | 0.94 | 0.80 | 0.18 | 5.01 | 0.943 |
| Fasting oGTT glucose (mmol/L) | 0.81 | 0.56 | 0.21 | 3.17 | 0.762 |
| 1-h oGTT glucose (mmol/L) | 0.74 | 0.19 | 0.45 | 1.20 | 0.222 |
| 2-h oGTT glucose (mmol/L) | 0.88 | 0.22 | 0.55 | 1.43 | 0.611 |
| HbA1c at the 1st GDM visit (%/mmol/mol) | 0.38 | 0.36 | 0.06 | 2.39 | 0.305 |
| Medical treatment requirement | 0.38 | 0.36 | 0.06 | 2.39 | 0.300 |

Linear and logistic regression analyses, adjusted for gestational age

Abbreviations: OR odds ratio, CI confidence interval, BMI body mass index, GDM gestational diabetes mellitus, oGTT oral glucose tolerance test, HbA1c glycated hemoglobin.

\* adjusted for gestational age using the Intergrowth 21st fetal size application tool [30]

† according to the Institute of Medicine Guidelines 2009 [28]

†† this value corresponds to a beta-coefficient