**Table S1** Generalised estimating equation statistics of fetal physical measures, with mean differences, 95% CI and p-values

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Test of Model Effects** | | | **Pairwise Comparison of Group** | | | | | |
| **Parameter** | **Effect** | **Wald-Chi Square** | **p-value** | **Group (a)** | **Group (b)** | **Mean Difference (a-b)** | **95% Wald Lower CI** | **95% Wald Upper CI** | **p-value** |
| **Birth Weight** | *Group* | 78.22 | **<0.001** | *Control* | *IUGR* | 35.98 | 27.58 | 44.38 | **<0.001** |
| *Sex* | 1.3 | 0.254 | *IUGR+PS* | 38.02 | 27.08 | 48.95 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | 20.4 | -7.58 | 11.65 | 0.678 |
| **Nose-rump Length** | *Group* | 49.74 | **<0.001** | *Control* | *IUGR* | 2.61 | 1.83 | 3.39 | **<0.001** |
| *Sex* | 1.33 | 0.248 | *IUGR+PS* | 1.98 | 1.22 | 2.74 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | -0.64 | -1.47 | 0.20 | 0.137 |
| **Visceral Fat** | *Group* | 20.71 | **<0.001** | *Control* | *IUGR* | 0.21 | 0.073 | 0.35 | **0.003** |
| *Sex* | 7.01 | **0.008** | *IUGR+PS* | 0.35 | 0.20 | 0.50 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | 0.14 | -0.004 | 0.29 | 0.058 |
| **Peripheral Fat** | *Group* | 9.02 | **0.011** | *Control* | *IUGR* | 0.6 | 0.04 | 1.13 | **0.034** |
| *Sex* | 0.07 | 0.794 | *IUGR+PS* | 0.64 | 0.22 | 1.06 | **0.003** |
|  | | | *IUGR* | *IUGR+PS* | 0.05 | -0.28 | 0.37 | 0.780 |
| **Brain Weight** | *Group* | 11.33 | **0.003** | *Control* | *IUGR* | 0.10 | 0.04 | 0.17 | **0.001** |
| *Sex* | 6.84 | **0.009** | *IUGR+PS* | 0.04 | -0.05 | 0.13 | 0.404 |
|  | | | *IUGR* | *IUGR+PS* | -0.07 | -0.16 | 0.03 | 0.162 |
| **Hippocampus Weight** | *Group* | 0.99 | 0.607 | *Control* | *IUGR* | 0.006 | -0.008 | 0.021 | 0.388 |
| *Sex* | 0.83 | 0.362 | *IUGR+PS* | -0.002 | -0.015 | 0.010 | 0.740 |
|  | | | *IUGR* | *IUGR+PS* | -0.009 | -0.026 | 0.009 | 0.334 |
| **Placenta Weight** | *Group* | 94.56 | **<0.001** | *Control* | *IUGR* | 2.47 | 1.96 | 2.97 | **<0.001** |
| *Sex* | 2.560 | 0.110 | *IUGR+PS* | 2.33 | 1.63 | 3.04 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | -0.13 | -0.76 | 0.50 | 0.687 |
| **Adrenal Weight** | *Group* | 10.79 | **0.005** | *Control* | *IUGR* | 0.011 | 0.005 | 0.018 | **0.001** |
| *Sex* | 0.07 | 0.799 | *IUGR+PS* | 0.007 | -0.003 | 0.017 | 0.180 |
|  | | | *IUGR* | *IUGR+PS* | -0.005 | -0.014 | 0.005 | 0.333 |
| **Kidney Weight** | *Group* | 42.53 | **>0.001** | *Control* | *IUGR* | 0.23 | 0.15 | 0.30 | **<0.001** |
| *Sex* | 0.24 | 0.621 | *IUGR+PS* | 0.21 | 0.14 | 0.28 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | -0.01 | -0.07 | 0.05 | 0.702 |
| **Liver Weight** | *Group* | 76.63 | **<0.001** | *Control* | *IUGR* | 2.38 | 1.81 | 2.94 | **<0.001** |
| *Sex* | 0.81 | 0.370 | *IUGR+PS* | 2.40 | 1.74 | 3.06 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | 0.03 | -0.55 | 0.60 | 0.928 |
| **Brain-to-Liver Ratio** | *Group* | 44.59 | **<0.001** | *Control* | *IUGR* | -0.57 | -0.84 | -0.30 | **<0.001** |
| *Sex* | 1.07 | 0.300 | *IUGR+PS* | -0.47 | -0.67 | -0.28 | **<0.001** |
|  | | | *IUGR* | *IUGR+PS* | 0.1 | -0.25 | 0.44 | 0.592 |

All physical measures assessed using generalised estimating equation (GEE). Wald-Chi Square type III test was used to determine effects of group (Control, IUGR, IUGR+PS) and sex (male, female). Significance was set as p<0.05. CI=confidence interval.