# S3 Table. Meta-regression for outcomes with significant heterogeneity between studies

## S3A Table. Meta-regression for gestational age (weeks)

| Variable | **Number of studies** | **Meta-regression residual *I2* (%)** | **Coefficient** | **P value** |
| --- | --- | --- | --- | --- |
|  *All studies* | *13* | *66.80* |  |  |
| **Type of surgery**All bariatric surgeryRYGB or BPDLAGB | 472 | 69.37% | -0.0763809 | p=0.58 |
| **Control group**ppBMI matched ObesityGeneral populationBefore surgery | 3343 | 69.35% | -0.0076803 | p=0.944 |
| **Publication year**2000–20042005–20092010–20142015+ | 1444 | 69.13% | -0.1040644 | p=0.444 |
| **Continent**EuropeAsiaNorth AmericaSouth America | 6151 | 69.15% | 0.0817169 | p=0.488 |
| **Sample size**1–100100–1,0001,000+ | 364 | 68.34% | -0.0216062 | p=0.901 |
| **Quality score**5/86/87/88/8  | 2605 | 67.88% | 0.1211809 | p=0.241 |

## S3B Table. Meta-regression for large for gestational age

| Variable | **Number of studies** | **Meta-regression residual *I2* (%)** | **Coefficient** | **P value** |
| --- | --- | --- | --- | --- |
| *All studies* | *21* | *69.50* |  |  |
| **Type of surgery**All bariatric surgeryRYGB or BPD LAGB or SG | 984 | 67.87 | -0.273883 | p=0.069 |
| **Control group**ppBMI matched ObesityGeneral populationBefore surgery | 6933 | 70.49 | 0.0391969  | p=0.778 |
| **Large baby definition**>90th percentileMean + 2 S.D or 22%>4000g | 1047 | 70.85 | 0.0579805 | p=0.734 |
| **Publication year**1995–19992000–20042005–20092010–20142015+ | 11568 | 67.74 | 0.1626055 | p=0.216 |
| **Continent**EuropeAsiaNorth America | 939 | 68.71 | 0.0109506 | p=0.939 |
| **Sample size**1–100100–1,0001,000–10,00010,000–100,000100,000+ | 212322 | **61.21** | **0.2493393** | **p=0.031** |
| **Quality score**5/86/87/88/8  | 25410 | 68.02 | 0.1293149 | p=0.337 |

Meta-regression was carried for gestational age and large for gestational age (LGA) due to heterogeneity remaining significant after subgroup analyses. Factors that significantly contributed to heterogeneity are highlighted in red. RYGB=Roux-en-Y gastric bypass. BPD=biliopancreatic diversion. LAGB=laparoscopic adjustable gastric banding. SG=sleeve gastrectomy. ppBMI=pre-pregnancy BMI matched. SD=standard deviation.