

Obesity & IVF / ICSI

1. Preterm birth
2. SGA
3. Stillbirth
4. Cardiometabolic risk factors

Preterm Birth

Obesity

1.5 x increased risk
≥32 weeks' gestation
Indicated (PET, FGR)
4 x higher neonatal mortality

IVF / ICSI

1.4-1.8 x increased risk
2.3 x increased risk <32 weeks'
Lower risk with frozen embryos
(but 1.7 x increased risk of LGA)

Fresh IVF: obese vs non-obese

1.4 x increased risk all PTB
2.2 x increased risk of birth <32 weeks' gestation

Stillbirth

Obesity

2-4 x increased risk

Increased presentation with
decreased fetal movements

1.8 x increased risk of SB after
an episode of decreased fetal
movements

IVF / ICSI

4 x increased risk

Chu, Am J Obstet Gynecol, 2007

Tveit, J Matern Fetal Neonatal Med, 2013

Wisborg, Placenta, 2008 De Graaff, J Matern Fetal Neonatal M, 2017

SGA

Obesity

1.5-1.8 x increased risk

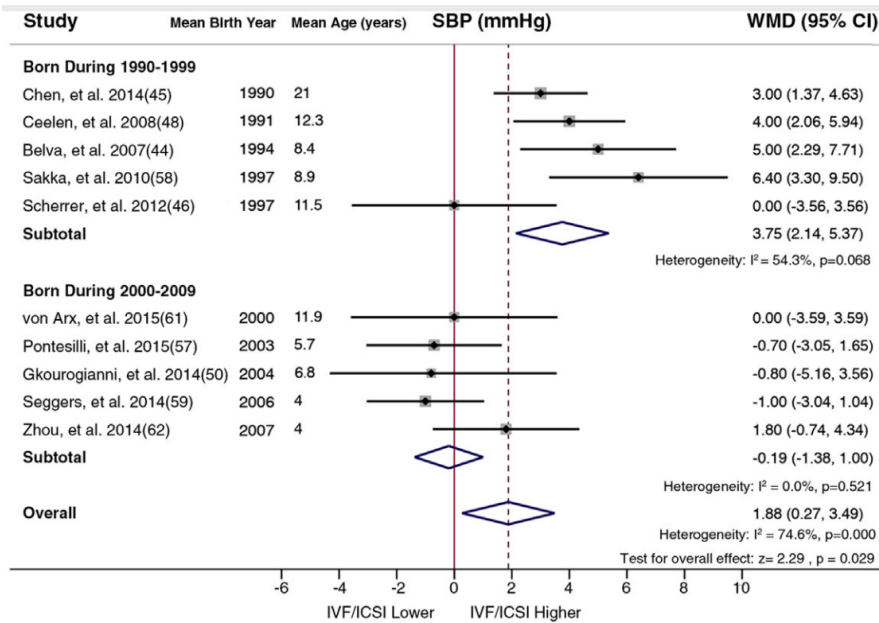
IVF / ICSI

1.4-2.6 x increased risk

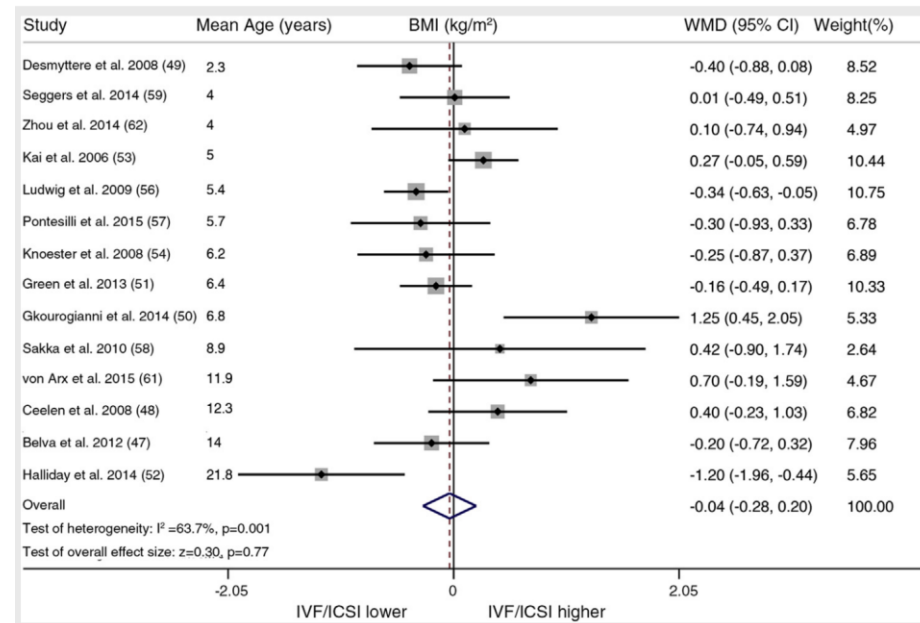
Risk halved with frozen embryos

IVF / ICSI & Cardiometabolic Risk

Childhood Blood Pressure

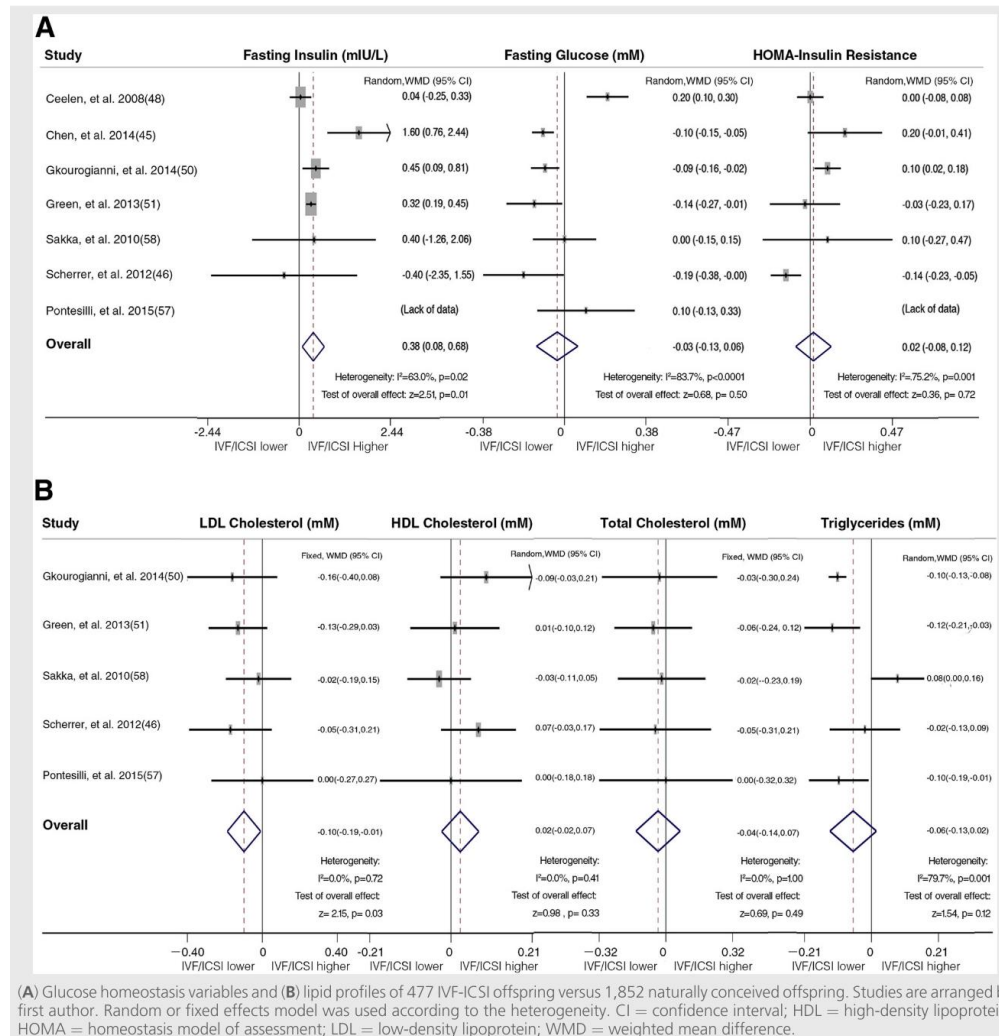


Childhood BMI



IVF / ICSI & Cardiometabolic Risk

Glucose



Summary

Likely compounding risks for

Preterm birth

Stillbirth

? SGA

Compounding risk of cardiometabolic disease does not appear to be a major concern

Avoiding excess gestational weight gain and infant fat gain still important