

SUPPLEMENTARY MATERIAL

Gestational diabetes mellitus and offspring's carotid intima-media thickness at birth: *MySweetHeart* Cohort Study

Adina Mihaela Epure^{1,2}, Stefano Di Bernardo³, Yvan Mivelaz³, Sandrine Estoppey Younes², Arnaud Chiolero^{1,4,5¶}, Nicole Sekarski^{3¶},
on behalf of *MySweetHeart* Research Group

¹Population Health Laboratory (#PopHealthLab), University of Fribourg, Fribourg, Switzerland;

²Department of Epidemiology and Health Services, Center for Primary Care and Public Health (UNISANTÉ), University of Lausanne, Lausanne, Switzerland;

³Paediatric Cardiology Unit, Woman-Mother-Child Department, Lausanne University Hospital (CHUV), Lausanne, Switzerland;

⁴Institute of Primary Health Care (BIHAM), University of Bern, Bern, Switzerland;

⁵School of Global and Population Health, McGill University, Montréal, Canada

¶ These authors contributed equally to this work.

Table S1 The relationship of GDM and assignment or not to a lifestyle and psychosocial intervention with offspring's CIMT at birth.

| | Mean (sd), mm | Model 1 (n=200) | | Model 2 (n=165) | | Model 3 (n=165) | |
|------------|---------------|------------------------------|------|------------------------------|------|------------------------------|------|
| | | Mean difference (95% CI), mm | p | Mean difference (95% CI), mm | p | Mean difference (95% CI), mm | p |
| Non-GDM | 0.30 (0.04) | ref | ref | ref | ref | ref | ref |
| GDM, non-I | 0.30 (0.04) | 0.00 (-0.01 to 0.01) | 0.94 | 0.00 (-0.02 to 0.02) | 0.93 | 0.00 (-0.02 to 0.01) | 0.91 |
| GDM, I | 0.30 (0.04) | 0.00 (-0.01 to 0.01) | 0.98 | -0.01 (-0.03 to 0.01) | 0.19 | -0.01 (-0.02 to 0.01) | 0.25 |

Estimates were obtained from linear regression models with the following specification: Model 1: unadjusted estimates; Model 2: estimates adjusted for maternal pre-pregnancy BMI, education, and tobacco smoking; offspring family history of diabetes and sex; Model 3: estimates adjusted for maternal pre-pregnancy BMI, education, and tobacco smoking; offspring family history of diabetes, sex, body surface area and age at CIMT assessment. The outcome variable (i.e., CIMT) was continuous. The exposure variable was categorical with 3 levels (Non-GDM/ GDM, non-I/ GDM, I; the reference category was Non-GDM). Similar results were obtained when Model 1 was run in the sample (n=165) with data on outcome, exposure, and all covariates included in Models 2 and 3 (GDM, non-I: 0.00 mm (95% CI: -0.01 to 0.01; p=0.99); GDM, I: -0.01 mm (95% CI: -0.02 to 0.01; p=0.29)). Abbreviations: CI, confidence interval; CIMT, carotid intima-media thickness; GDM, gestational diabetes mellitus; I, intervention; n, total number of participants; p, p-value; sd, standard deviation; ref, reference group.

Fig. S1 Illustration of the relationship of GDM and assignment or not to a lifestyle and psychosocial intervention with offspring's CIMT through a forest plot.

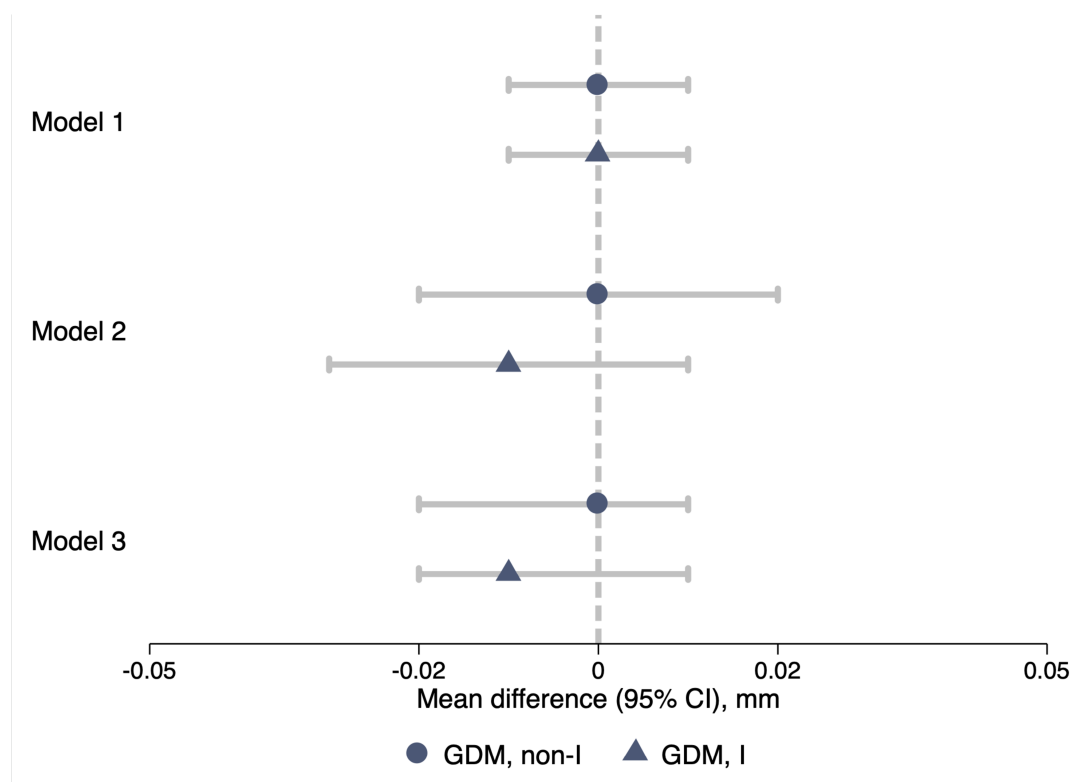


Figure legend The circles represent mean differences in CIMT between offspring of women with GDM assigned to no intervention (*GDM, non-I*) and offspring of women without GDM (*Non-GDM*). The triangles represent mean differences in CIMT between offspring of women with GDM assigned to a lifestyle and psychosocial intervention (*GDM, I*) and offspring of women without GDM (*Non-GDM*). The horizontal lines represent the 95% CIs. The plot was constructed using regression estimates and models presented in Table S1. Model specification: Model 1 is unadjusted, while Models 2 and 3 are adjusted for various factors as described in the methods and footnote of Table S1. Abbreviations: CI, confidence interval; CIMT, carotid intima-media thickness; GDM, gestational diabetes; I, intervention.

Fig. S2 Dot plot of CIMT at birth by gestational diabetes mellitus (GDM) and assignment to a lifestyle and psychosocial intervention (I).

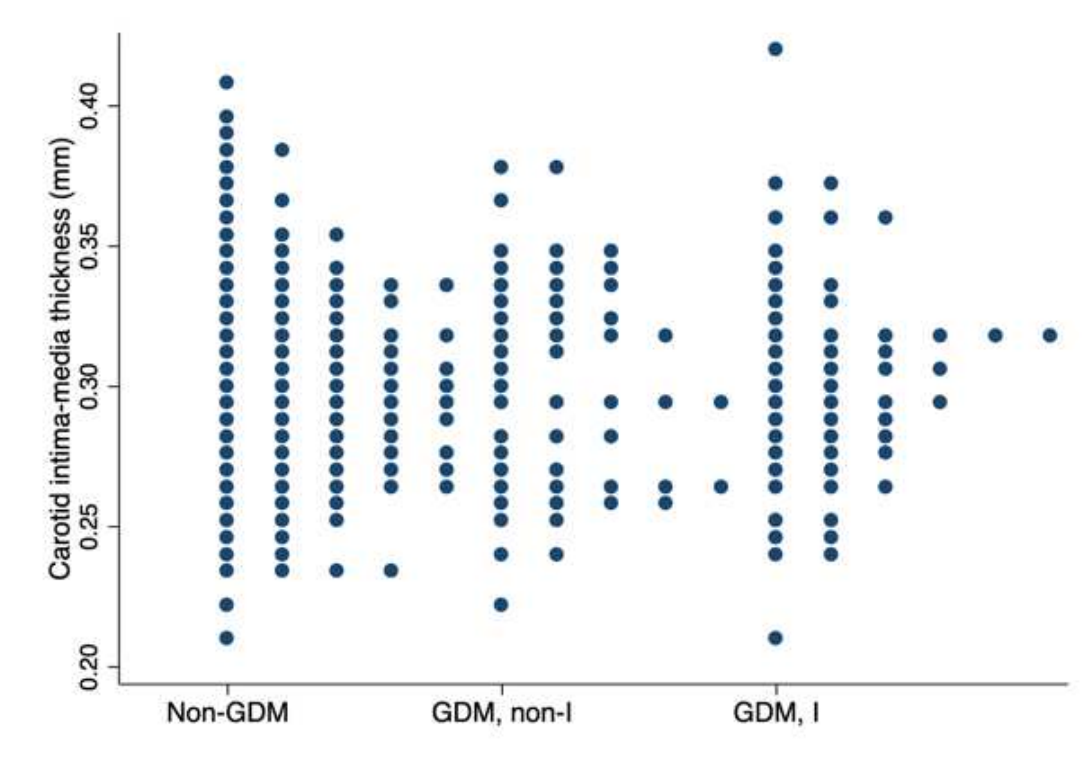


Figure legend This figure shows the distribution of CIMT in the offspring of women without GDM (*Non-GDM*) and the offspring of women with GDM who were assigned to no intervention (*GDM, non-I*) or to a lifestyle and psychosocial intervention (*GDM, I*) as part of their participation in the *MySweetHeart* Trial. Abbreviations: CIMT, carotid intima-media thickness; GDM, gestational diabetes mellitus; I, intervention.