**S1 Table: Association between Number of Children and cIMT in Previous Studies**

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| **First Author (Country)** | **Study Population**  | **N** | **Mean Age in Years** | **Number of children** | **Adjusted for** | **Findings** |
| Skilton 2010 (Finland) [[1](#_ENREF_1)] | Prospective cohort study with Finnish participants followed from 2001-2007  | 1,005 females781 males | 28-33  | Childbirth within 6 year follow-up 0 1 ≥ 2  | Age, baseline no. children, cIMT, employment status, marital status, cardiovascular risk factors at baseline and at the end of study | Mean cIMT increased by 6.4µm per child born (p=0.05) for women. Negative association was observed among males (P trend= 0.04). |
| Humphries 2001(The Netherlands) [[2](#_ENREF_2)] | Cross-sectional study in Ommoord, a suburb of Rotterdam, Netherland  | 4,878 females | 55-99 | 0 1 2-3 ≥ 4  | Age, smoking, socioeconomic, hypertension, diastolic and systolic blood pressures, BMI, lipids and insulin/glucose ratio at baseline | Adjusted mean IMTs were 750, 740, 770 and 810 (µm) for women in each parity categories respectively. There was a statistically significant positive trend (p=0.005). |
| Skilton 2009 (France) [[3](#_ENREF_3)] | Cross-sectional study of outpatients at the Centre for Prevention and Detection of Atherosclerosis  | 718 females1,164 males | 18-80 | 0 1 2-3 ≥ 4  | Age, employment, marital status, physical activity, waist circumference, dietary, score, smoking, hypertension, HDL cholesterol, LDL cholesterol, log triglycerides and glucose. | Per increment of one child was related to a difference of 7 µm in mean cIMT (p=0.056). The difference in IMT only marked among women of ≥ 4 births compared to nulliparous women (β=62 µm, p=0.006). Among men, the association was not significant (p=0.74). |
| Kharazmi 2007 (Finland) [[4](#_ENREF_4)] | Cross-sectional study of the nationally representative population of Finns  | 746females | 45-74 | 0 1 2-3 ≥ 4  | Age, systolic and diastolic blood pressure, fasting blood glucose and cholesterol, education, smoking and body mass index | The association between cIMT and parity was significant only in crude model. Further adjustment for age and other covariates removed the significant association (p=0.48). |
| Wolff 2005 (Germany)[[5](#_ENREF_5)] | Cross-sectional study from Population in West Pomerania  | 1,195 females | 20-79 | 0 1 2 3 ≥ 4  | Age, socioeconomic factors, lifestyle variables, hypertension, hormone replacement therapy, age at menopause and oral contraceptives | There was a U-shaped association between mean cIMT and parity. Women with 1 and 2 children had the lowest mean IMT compared to nulliparous and multiparous women. |
| Niemczyk 2015 (USA)[[6](#_ENREF_6)] | Secondary analysis data of participants from the Slow Adverse Vascular Effects (SAVE) clinical trial in Allegheny Country, PA (overweight/obese women with BMI 25-39.9 kg/m2) | 172females  | 25-45 | 0 1 2 ≥3  | Age, race, BMI, education, current smoking, alcohol, average systolic blood pressure and fasting glucose level on the carotid measures | Mean cIMT values did not differ by parity. Yet, when categorized as nulliparous and parous women, there was a statistically significant negative association. Nulliparous women had thicker CCA-IMT than parous women (p=0.007) by 29 µm (p=0.009). |

**References**

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