

Associations of Maternal Preterm Birth with Subsequent Risk for Type 2 Diabetes in Women from the Women's Health Initiative

Short title: Maternal Preterm Birth and Risk for T2D

SUPPLEMENTARY MATERIALS

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Supplementary Table 1: Relationship between being born preterm and incident self-reported type 2 diabetes among postmenopausal women in the WHI, stratified by birthweight				
	Birthweight Category			
	< 6 lbs. HR (95% CI)	6-7.9 lbs. HR (95% CI)	8-9.9 lbs. HR (95% CI)	≥ 10 lbs. HR (95% CI)
N (T2D Cases)	7,404 (1,040)	48,988 (6,605)	14,561 (2,019)	2,479 (355)
Type 2 Diabetes				
Unadjusted (T2D cases=10,019)	1.06 (0.92, 1.23)	0.80 (0.56, 1.15)	0.92 (0.30, 2.86)	---
Adj for Demographics (T2D cases=6,790)	1.06 (0.90, 1.25)	0.77 (0.51, 1.15)	1.01 (0.33, 3.14)	---
Adj for Demographics & Lifestyle Factors (T2D cases=6,592)	1.04 (0.88, 1.22)	0.78 (0.52, 1.17)	1.09 (0.35, 3.40)	---

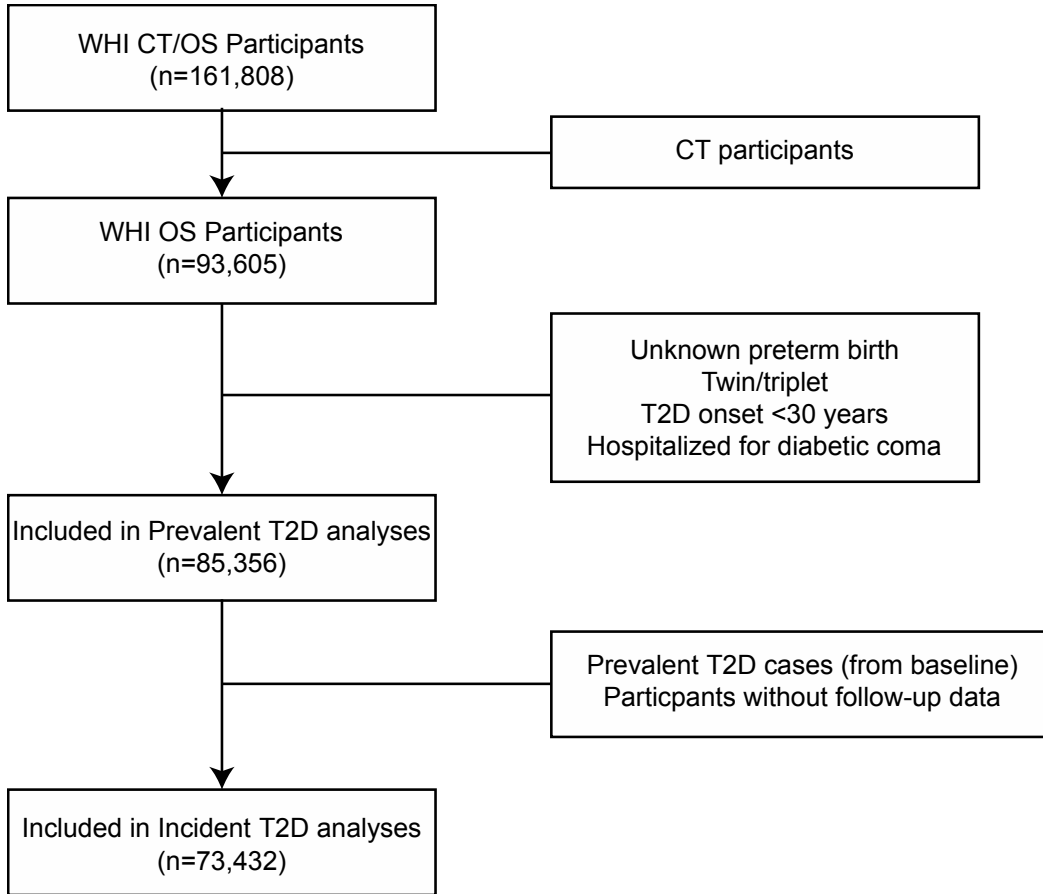
Referent group for each analytical model is full term births. There were an insufficient number of preterm participants born weighing ≥10 pounds, as expected; therefore, these results are left blank. Demographic factors include age, race, ethnicity, normalized socioeconomic status, education, region, and family history of diabetes. Lifestyle factors include BMI, smoking status, and alcohol use.

Supplementary Table 2: Relationship between being born preterm and incident self-reported type 2 diabetes among postmenopausal women in the WHI, stratified by self-reported race/ethnicity						
	Race				Ethnicity	
	Asian HR (95% CI)	Black HR (95% CI)	White HR (95% CI)	Other HR (95% CI)	Hispanic/Spainish/ Latinx HR (95% CI)	Not Hispanic/ Spanish/Latinx HR (95% CI)
N (T2D cases)	1,807 (257)	7,749 (1,062)	69,662 (9,418)	1,187 (200)	3,755 (556)	77,746 (10,521)
Type 2 Diabetes						
Unadjusted (T2D cases=11,077)	0.89 (0.37, 2.15)	1.13 (0.78, 1.65)	1.50 (0.92, 1.19)	1.08 (0.48, 2.43)	1.18 (0.72, 1.94)	1.04 (0.92, 1.18)
Adj for Birthweight (T2D cases = 9,956)	0.97 (0.38, 2.48)	1.06 (0.69, 1.62)	1.04 (0.90, 1.20)	0.85 (0.35, 2.05)	0.98 (0.57, 1.69)	1.02 (0.89, 1.18)
Adj for Demographics (T2D cases = 7,529)	1.11 (0.41, 3.01)	1.33 (0.89, 1.98)	1.00 (0.87, 1.16)	1.15 (0.47, 2.80)	1.64 (0.90, 3.00)	1.04 (0.90, 1.22)
Adj for Demographics & Birthweight (T2D cases=6,790)	1.39 (0.48, 4.04)	1.16 (0.73, 1.84)	0.99 (0.84, 1.16)	1.08 (0.40, 2.88)	1.35 (0.69, 2.66)	0.99 (0.84, 1.18)
Adj for Demographics & Lifestyle Factors (T2D cases = 7,307)	1.24 (0.45, 3.37)	1.36 (0.91, 2.03)	0.99 (0.86, 1.15)	1.19 (0.49, 2.93)	1.74 (0.95, 3.20)	1.04 (0.89, 1.21)
Adj for Demographics & Lifestyle Factors & Birthweight (T2D cases = 6,592)	1.38 (0.47, 4.02)	1.20 (0.76, 1.91)	0.97 (0.82, 1.14)	1.10 (0.41, 2.98)	1.46 (0.74, 2.89)	0.98 (0.83, 1.16)

Referent group is full term births. Due to small sample sizes, we were unable to consider other self-identified race categories in the stratified analyses, which include: Native Hawaiian/Other Pacific Islander, American Indian/Alaskan Native, and multi-racial. Demographic factors include age, normalized socioeconomic status, education, region, and family history of diabetes. Lifestyle factors include BMI, smoking status, and alcohol use.

Supplementary Table 3: Relationship between being born preterm and incident self-reported type 2 diabetes among postmenopausal women in the WHI, stratified by age group at enrollment			
	Age group at enrollment		
	<50-59yr OR (95% CI)	60-69yr OR (95% CI)	70-79+yr OR (95% CI)
N	26,650 (3,696)	35,727 (4,935)	19,202 (2,516)
Type 2 Diabetes			
Unadjusted (T2D cases=11,147)	1.00 (0.83, 1.21)	1.01 (0.84, 1.23)	1.18 (0.89, 1.56)
Adj for Birthweight (T2D cases=10,019)	1.00 (0.81, 1.24)	0.98 (0.80, 1.21)	1.12 (0.82, 1.53)
Adj for Demographics (T2D cases=9,410)	0.91 (0.73, 1.14)	1.10 (0.90, 1.34)	1.19 (0.89, 1.60)
Adj for Demographics & Birthweight (T2D cases=8,506)	0.89 (0.70, 1.14)	1.09 (0.87, 1.36)	1.11 (0.79, 1.55)
Adj for Demographic & Lifestyle Factors (T2D cases=9,143)	0.90 (0.71, 1.12)	1.09 (0.89, 1.34)	1.22 (0.90, 1.64)
Adj for Demographic & Lifestyle Factors & Birthweight (T2D cases=8,269)	0.87 (0.68, 1.12)	1.07 (0.86, 1.35)	1.12 (0.80, 1.58)

Referent group for each analytical model is full term births. Demographic factors include age, race, ethnicity, normalized socioeconomic status, education, region, and family history of diabetes. Lifestyle factors include BMI, smoking status, and alcohol use.

FIGURES

Supplementary Figure 1. Flow chart of subject selection from WHI for the prevalent and incident analyses. Abbreviations: CT, clinical trial; OS, observational study; T2D, type 2 diabetes; WHI, Women's Health Initiative