

Supplementary Online Content

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eTable 1. Summary of ICD codes and diagnoses included in the analyses.

<i>ICD-8</i>	<i>ICD-9</i>	<i>ICD-10</i>	Diagnoses
250	250	E10-E14	Diabetes mellitus
400	--	--	Malignant hypertension
401	401	I10	Essential benign hypertension
402	402	I11	Hypertensive heart disease
403	403	I12	Hypertensive renal disease
404	404	I13	Hypertensive heart and renal disease
--	405	I15	Secondary hypertension
410	410	I21	Acute myocardial infarction
411	411	I22-I24	Other acute and subacute forms of ischemic heart disease
412	412	I25	Chronic ischemic heart disease
413	413	I20	Angina pectoris
414	414	--	Other forms of chronic ischemic heart disease
637	624.4-624.7	O14-O15	Preeclampsia
--	642.0-642.3, 642.9	O10-O11, O13, O16	Hypertension in pregnancy, childbirth and the puerperium
--	648.0	O24	Diabetes mellitus in pregnancy
740-759	740-759	Q00-Q99	Congenital malformations

eTable 2. Unadjusted hazard ratios for IHD risk associated with gestational age at birth, Sweden, 1973-2015.

	All			Men			Women		
	Cases	Rate ^a	HR (95% CI) ^b	Cases	Rate ^a	HR (95% CI) ^b	Cases	Rate ^a	HR (95% CI) ^b
Attained ages 18-43 years									
Preterm (<37 wks)	126	8.79	1.55 (1.29, 1.87)	77	9.69	1.31 (1.04, 1.65)	49	7.67	1.99 (1.48, 2.68)
Early preterm (<34 wks)	17	5.71	1.02 (0.63, 1.65)	9	5.45	0.75 (0.39, 1.44)	8	6.03	1.59 (0.79, 3.20)
Late preterm (34-36 wks)	109	9.60	1.69 (1.39, 2.06)	68	10.80	1.45 (1.13, 1.86)	41	8.10	2.10 (1.52, 2.89)
Early term (37-38 wks)	323	6.48	1.17 (1.04, 1.33)	221	8.32	1.14 (0.99, 1.33)	102	4.38	1.17 (0.94, 1.45)
Full-term (39-41 wks)	1,247	5.85	Reference	830	7.64	Reference	417	3.99	Reference
Post-term (≥42 wks)	225	7.04	1.09 (0.94, 1.26)	157	9.55	1.14 (0.96, 1.35)	68	4.38	0.99 (0.77, 1.28)
Per additional week (trend)			0.96 (0.94, 0.98)			0.98 (0.95, 1.01)			0.93 (0.90, 0.97)
Attained ages 18-29 years									
Preterm (<37 wks)	52	4.98	1.46 (1.09, 1.94)	29	5.03	1.17 (0.80, 1.71)	23	4.92	1.95 (1.27, 3.01)
Early preterm (<34 wks)	5	2.28	0.67 (0.28, 1.61)	3	2.48	0.58 (0.19, 1.81)	2	2.04	0.81 (0.20, 3.26)
Late preterm (34-36 wks)	47	5.70	1.66 (1.23, 2.24)	26	5.71	1.33 (0.89, 1.98)	21	5.69	2.25 (1.44, 3.54)
Early term (37-38 wks)	142	3.85	1.13 (0.94, 1.35)	100	5.14	1.20 (0.96, 1.50)	42	2.42	0.96 (0.69, 1.34)
Full-term (39-41 wks)	520	3.42	Reference	332	4.29	Reference	188	2.52	Reference
Post-term (≥42 wks)	79	3.74	1.08 (0.85, 1.37)	54	4.92	1.14 (0.85, 1.51)	25	2.46	0.97 (0.64, 1.47)
Per additional week (trend)			0.97 (0.94, 1.01)			0.98 (0.94, 1.03)			0.96 (0.90, 1.03)
Attained ages 30-43 years									
Preterm (<37 wks)	74	18.99	1.63 (1.28, 2.07)	48	22.00	1.41 (1.04, 1.89)	26	15.16	2.02 (1.35, 3.04)
Early preterm (<34 wks)	12	15.31	1.31 (0.74, 2.33)	6	13.64	0.87 (0.39, 1.95)	6	17.44	2.34 (1.04, 5.25)
Late preterm (34-36 wks)	62	19.92	1.71 (1.32, 2.22)	42	24.12	1.54 (1.12, 2.11)	20	14.59	1.95 (1.23, 3.07)
Early term (37-38 wks)	181	13.92	1.21 (1.03, 1.42)	121	17.08	1.10 (0.90, 1.34)	60	10.15	1.37 (1.03, 1.82)
Full-term (39-41 wks)	727	11.86	Reference	498	15.91	Reference	229	7.64	Reference
Post-term (≥42 wks)	146	13.46	1.10 (0.92, 1.31)	103	18.79	1.14 (0.92, 1.41)	43	8.01	1.01 (0.73, 1.41)
Per additional week (trend)			0.95 (0.92, 0.98)			0.98 (0.94, 1.01)			0.92 (0.87, 0.96)

^aIHD incidence rate per 100,000 person-years.

^bAttained age was used as the Cox model time axis.

eTable 3. Interactions between gestational age at birth and sex in relation to IHD risk at ages 18-43 years.

	Gestational age at birth						HRs (95% CI) for early term vs. full-term within sex strata	HRs (95% CI) for preterm vs. full-term within sex strata
	Full-term (39-41 wks)		Early term (37-38 wks)		Preterm (<37 wks)			
	Rate ^a (Cases)	HR (95% CI) ^b	Rate ^a (Cases)	HR (95% CI) ^b	Rate ^a (Cases)	HR (95% CI) ^b		
Sex								
Female	3.99 (417)	Reference	4.38 (102)	1.19 (0.96, 1.48)	7.67 (49)	1.89 (1.40, 2.54)	1.19 (0.96, 1.48)	1.89 (1.40, 2.54)
Male	7.64 (830)	1.92 (1.70, 2.16)	8.32 (221)	2.19 (1.86, 2.58)	9.69 (77)	2.39 (1.87, 3.05)	1.14 (0.97, 1.31)	1.25 (0.95, 1.54)
HRs (95% CI) for male vs. female within gestational age strata		1.92 (1.70, 2.16)		1.85 (1.41, 2.28)		1.27 (0.81, 1.72)		
Interaction on additive scale: RERI (95% CI)			0.09 (-0.31, 0.49); <i>P</i> =0.67		-0.41 (-1.19, 0.36); <i>P</i> =0.30			
Interaction on multiplicative scale: HR ratio (95% CI)			0.96 (0.71, 1.22); <i>P</i> =0.77		0.66 (0.41, 0.91); <i>P</i> =0.008			

^aIHD incidence rate per 100,000 person-years.

^bAdjusted for child characteristics (birth year, fetal growth, birth order, congenital anomalies) and maternal characteristics (age, education, birth country or region, BMI, smoking, preeclampsia, other hypertensive disorders, diabetes).

HR = hazard ratio, RERI = relative excess risk due to interaction

eTable 4. Interactions between gestational age at birth and fetal growth in relation to IHD risk at ages 18-43 years.

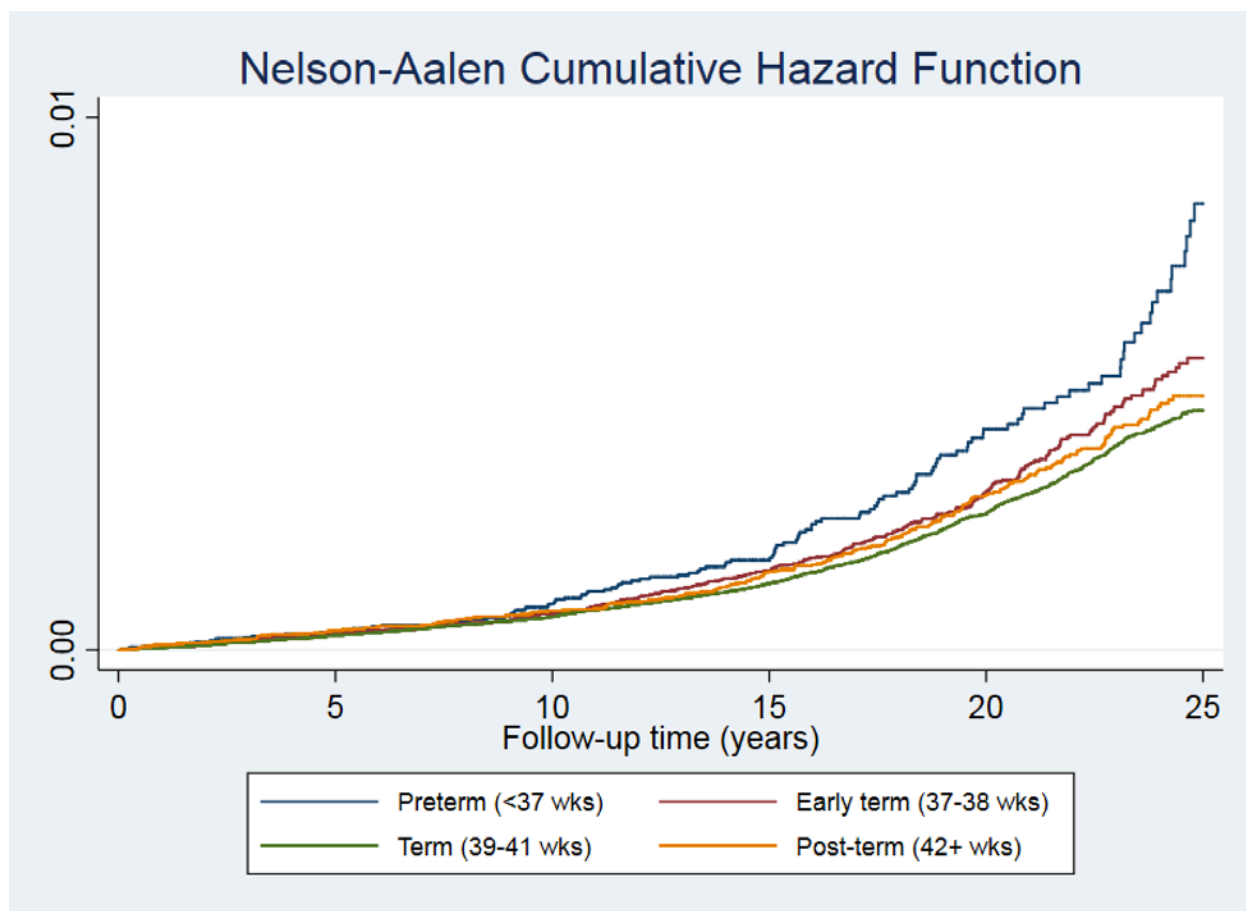
	Gestational age at birth						HRs (95% CI) for early term vs. full-term within growth strata	HRs (95% CI) for preterm vs. full-term within growth strata
	Full-term (39-41 wks)		Early term (37-38 wks)		Preterm (<37 wks)			
	Rate ^a (Cases)	HR (95% CI) ^b	Rate ^a (Cases)	HR (95% CI) ^b	Rate ^a (Cases)	HR (95% CI) ^b		
Fetal growth^c								
Moderate (-1 to 1 SD from mean)	4.47 (668)	Reference	5.32 (191)	1.28 (1.11, 1.49)	6.55 (69)	1.52 (1.22, 1.90)	1.28 (1.11, 1.49)	1.52 (1.22, 1.90)
Low (>1 SD below mean)	7.37 (251)	1.26 (1.06, 1.50)	7.02 (41)	1.24 (0.91, 1.70)	10.45 (21)	1.85 (1.22, 2.81)	0.99 (0.68, 1.29)	1.47 (0.87, 2.07)
HRs (95% CI) for low vs. moderate fetal growth within gest. age strata		1.26 (1.06, 1.50)		0.97 (0.65, 1.29)		1.22 (0.66, 1.78)		
Interaction on additive scale: RERI (95% CI)			-0.30 (-0.73, 0.12); <i>P</i> =0.16		0.07 (-0.75, 0.88); <i>P</i> =0.87			
Interaction on multiplicative scale: HR ratio (95% CI)			0.77 (0.51, 1.03); <i>P</i> =0.08		0.96 (0.51, 1.41); <i>P</i> =0.88			

^aIHD incidence rate per 100,000 person-years.

^bAdjusted for child characteristics (birth year, fetal growth, birth order, congenital anomalies) and maternal characteristics (age, education, birth country or region, BMI, smoking, preeclampsia, other hypertensive disorders, diabetes).

^cFetal growth was defined as number of SD from mean birth weight for gestational age and sex based on Swedish reference intrauterine growth curves.

HR = hazard ratio, RERI = relative excess risk due to interaction



eFigure 1. Nelson-Aalen cumulative hazard functions for IHD by gestational age at birth, Sweden, 1973-2015.