

Supplemental Table 1 Associations of maternal and fetal placental pathologies with birth outcomes after excluding 130 women with preeclampsia or gestational hypertension.

	Adjusted OR (95% CI) ^a			
	Non-SGA/term	Non-SGA/preterm	SGA/term	SGA/preterm
Maternal vascular obstructive (MVO)				
All women (<i>n</i> =106 vs. 918)	1.00 (Reference)	0.54 (0.27, 1.07)	4.27 (2.15, 8.50)	5.03 (1.22, 2.79)
Exclusion of high CRH (<i>n</i> =75 vs. 707)	1.00 (Reference)	0.60 (0.26, 1.39)	5.63 (2.62, 12.07)	7.31 (1.35, 39.48)
Fetal vascular obstructive (FVO)				
All women (<i>n</i> =220 vs. 804)	1.00 (Reference)	0.67 (0.43, 1.03)	1.88 (0.98, 3.60)	8.68 (2.23, 33.79)
Exclusion of high CRH (<i>n</i> =172 vs. 611)	1.00 (Reference)	0.81 (0.49, 1.32)	1.90 (0.94, 3.85)	1.29 (1.75, 49.69)
Maternal disturbance of vascular integrity (MVI)				
All women (<i>n</i> =215 vs. 809)	1.00 (Reference)	1.49 (1.02, 2.19)	1.21 (0.58, 2.54)	3.11 (0.88, 10.94)
Exclusion of high CRH (<i>n</i> =167 vs. 616)	1.00 (Reference)	1.43 (0.91, 2.23)	1.30 (0.59, 2.82)	2.54 (0.48, 13.48)
Fetal disturbance of vascular integrity (FVI)				
All women (<i>n</i> =414 vs. 610)	1.00 (Reference)	2.35 (1.68, 3.28)	0.96 (0.52, 1.77)	3.35 (0.87, 12.90)
Exclusion of high CRH (<i>n</i> =324 vs. 459)	1.00 (Reference)	2.64 (1.78, 3.93)	0.91 (0.46, 1.69)	1.42 (0.27, 7.59)
Maternal vascular developmental lesions (MVD)				
All women (<i>n</i> =143 vs. 881)	1.00 (Reference)	1.78 (1.08, 2.92)	1.35 (0.59, 3.10)	0.48 (0.05, 4.63)
Exclusion of high CRH (<i>n</i> =119 vs. 664) ^b	1.00 (Reference)	1.89 (1.08, 3.31)	1.49 (0.63, 3.55)	-- ^b

^a Estimates are derived from a multinomial logistic regression model that includes maternal pre-pregnancy BMI, race/ethnicity, gestational diabetes, and smoking habits during pregnancy. Bolded values indicate statistical significance at alpha <0.05.

^b Non-estimable value for SGA/preterm category due to sparse cell size.

Supplemental Table 2 Associations of maternal and fetal placental pathologies with birth outcomes after excluding 58 women with gestational diabetes mellitus (GDM).

	Adjusted OR (95% CI) ^a			
	Non-SGA/term	Non-SGA/preterm	SGA/term	SGA/preterm
Maternal vascular obstructive (MVO)				
All women (<i>n</i> =129 vs. 967)	1.00 (Reference)	0.85 (0.51, 1.43)	4.21 (2.18, 8.13)	8.52 (2.88, 25.15)
Exclusion of high CRH (<i>n</i> =83 vs. 733)	1.00 (Reference)	0.71 (0.34, 1.47)	5.40 (2.56, 11.41)	5.42 (1.09, 26.99)
Fetal vascular obstructive (FVO)				
All women (<i>n</i> =243 vs. 853)	1.00 (Reference)	0.82 (0.56, 1.21)	1.72 (0.92, 3.23)	12.10 (3.64, 40.27)
Exclusion of high CRH (<i>n</i> =178 vs. 638)	1.00 (Reference)	0.80 (0.50, 1.28)	2.00 (1.00, 4.00)	6.76 (1.57, 29.10)
Maternal disturbance of vascular integrity (MVI)				
All women (<i>n</i> =241 vs. 855)	1.00 (Reference)	1.49 (1.04, 2.14)	1.21 (0.61, 2.40)	3.08 (0.99, 9.60)
Exclusion of high CRH (<i>n</i> =177 vs. 639)	1.00 (Reference)	1.42 (0.92, 2.19)	1.39 (0.65, 2.98)	1.89 (0.31, 11.57)
Fetal disturbance of vascular integrity (FVI)				
All women (<i>n</i> =445 vs. 651)	1.00 (Reference)	2.14 (1.55, 2.96)	0.92 (0.51, 1.66)	1.49 (0.47, 4.70)
Exclusion of high CRH (<i>n</i> =339 vs. 477)	1.00 (Reference)	2.40 (1.62, 3.54)	0.79 (0.40, 1.54)	0.87 (0.15, 4.94)
Maternal vascular developmental lesions (MVD)				
All women (<i>n</i> =153 vs. 943)	1.00 (Reference)	2.02 (1.27, 3.22)	1.55 (0.70, 3.46)	1.49 (0.32, 6.80)
Exclusion of high CRH (<i>n</i> =120 vs. 696)	1.00 (Reference)	1.86 (1.07, 3.24)	1.47 (0.63, 3.49)	-- ^b

a Estimates are derived from a multinomial logistic regression model that includes maternal pre-pregnancy BMI, race/ethnicity, hypertensive disorders of pregnancy, and smoking habits during pregnancy. Bolded values indicate statistical significance at alpha <0.05.

b Non-estimable value for SGA/preterm category due to sparse cell size.

Supplemental Table 3 Associations of maternal and fetal placental pathologies with birth outcomes after excluding 88 medically-indicated preterm deliveries.

	Adjusted OR (95% CI) ^a			
	Non-SGA/term	Non-SGA/preterm	SGA/term	SGA/preterm
Maternal vascular obstructive (MVO)				
All women (<i>n</i> =109 vs. 957)	1.00 (Reference)	0.52 (0.25, 1.07)	4.10 (2.14, 7.88)	5.67 (0.37, 86.55)
Exclusion of high CRH (<i>n</i> =77 vs. 736)	1.00 (Reference)	0.63 (0.26, 1.49)	5.27 (2.51, 11.06)	-- ^b
Fetal vascular obstructive (FVO)				
All women (<i>n</i> =223 vs. 843)	1.00 (Reference)	0.69 (0.45, 1.08)	1.62 (0.87, 3.00)	2.41 (0.13, 44.82)
Exclusion of high CRH (<i>n</i> =175 vs. 638)	1.00 (Reference)	0.91 (0.55, 1.50)	1.89 (0.96, 3.74)	-- ^b
Maternal disturbance of vascular integrity (MVI)				
All women (<i>n</i> =229 vs. 837)	1.00 (Reference)	1.69 (1.15, 2.47)	1.17 (0.60, 2.28)	-- ^b
Exclusion of high CRH (<i>n</i> =178 vs. 635)	1.00 (Reference)	1.70 (1.09, 2.67)	1.28(0.60, 2.71)	-- ^b
Fetal disturbance of vascular integrity (FVI)				
All women (<i>n</i> =419 vs. 647)	1.00 (Reference)	2.09 (1.48, 2.95)	0.98 (0.55, 1.75)	3.53 (0.17, 74.49)
Exclusion of high CRH (<i>n</i> =327 vs. 486)	1.00 (Reference)	2.14 (0.43, 1.61)	0.83 (0.43, 1.61)	-- ^b
Maternal vascular developmental lesions (MVD)				
All women (<i>n</i> =148 vs. 918)	1.00 (Reference)	1.77 (1.07, 2.93)	1.40 (0.62, 3.16)	7.00 (0.25, 196.69)
Exclusion of high CRH (<i>n</i> =123 vs. 690)	1.00 (Reference)	1.90 (1.06, 3.40)	1.34 (0.57, 3.17)	-- ^b

a Estimates are derived from a multinomial logistic regression model adjusted for maternal pre-pregnancy BMI, race/ethnicity, gestational diabetes, and smoking habits during pregnancy. Bolded values indicate statistical significance at alpha <0.05.

b Non-estimable value for SGA/preterm category due to sparse cell size.

Supplemental Table 4 Associations of maternal and fetal placental pathologies with birth outcomes after excluding 93 women with preeclampsia or gestational hypertension, followed by 88 medically-indicated deliveries.

	Adjusted OR (95% CI) ^a			
	Non-SGA/term	Non-SGA/preterm	SGA/term	SGA/preterm
Maternal vascular obstructive (MVO)				
All women (<i>n</i> =99 vs. 874)	1.00 (Reference)	0.54 (0.25, 1.25)	4.28 (2.14, 8.53)	5.38 (0.33, 87.04)
Exclusion of high CRH (<i>n</i> =70 vs. 673)	1.00 (Reference)	0.66 (0.26, 1.66)	5.61 (2.61, 12.04)	-- ^b
Fetal vascular obstructive (FVO)				
All women (<i>n</i> =205 vs. 768)	1.00 (Reference)	0.66 (0.41, 1.05)	1.90 (0.99, 3.64)	2.38 (0.13, 43.96)
Exclusion of high CRH (<i>n</i> =162 vs. 581)	1.00 (Reference)	0.88 (0.52, 1.50)	1.88 (0.92, 3.83)	-- ^b
Maternal disturbance of vascular integrity (MVI)				
All women (<i>n</i> =206 vs. 767)	1.00 (Reference)	1.80 (1.21, 2.68)	1.23 (0.59, 2.58)	-- ^b
Exclusion of high CRH (<i>n</i> =161 vs. 582)	1.00 (Reference)	1.81 (1.13, 2.90)	1.33 (0.61, 2.89)	-- ^b
Fetal disturbance of vascular integrity (FVI)				
All women (<i>n</i> =380 vs. 593)	1.00 (Reference)	2.21 (1.54, 3.16)	0.97 (0.52, 1.78)	3.51 (0.16, 78.12)
Exclusion of high CRH (<i>n</i> =296 vs. 447)	1.00 (Reference)	2.31 (1.50, 3.55)	0.91 (0.46, 1.80)	-- ^b
Maternal vascular developmental lesions (MVD)				
All women (<i>n</i> =136 vs. 837)	1.00 (Reference)	1.78 (1.04, 3.03)	1.33 (0.58, 3.07)	6.52 (0.24, 174.71)
Exclusion of high CRH (<i>n</i> =113 vs. 630)	1.00 (Reference)	1.90 (1.03, 3.52)	1.48 (0.62, 3.54)	-- ^b

a Estimates are derived from a multinomial logistic regression model that includes maternal pre-pregnancy BMI, race/ethnicity, gestational diabetes, and smoking habits during pregnancy. Bolded values indicate statistical significance at alpha <0.05.

b Non-estimable value for SGA/preterm category due to sparse cell size.

Supplemental Table 5 Associations of maternal and fetal placental pathologies with birth outcomes after excluding 58 women with gestational diabetes mellitus (GDM), followed by 82 women with medically-indicated preterm deliveries.

	Adjusted OR (95% CI) ^a			
	Non-SGA/term	Non-SGA/preterm	SGA/term	SGA/preterm
Maternal vascular obstructive (MVO)				
All women (<i>n</i> =107 vs. 907)	1.00 (Reference)	0.47 (0.22, 1.00)	4.26 (2.21, 8.22)	5.46 (0.34, 88.08)
Exclusion of high CRH (<i>n</i> =76 vs. 692)	1.00 (Reference)	0.64 (0.27, 1.54)	5.38 (2.54, 11.39)	-- ^b
Fetal vascular obstructive (FVO)				
All women (<i>n</i> =214 vs. 800)	1.00 (Reference)	0.71 (0.46, 1.12)	1.73 (0.92, 3.25)	2.38 (0.13, 43.96)
Exclusion of high CRH (<i>n</i> =168 vs. 600)	1.00 (Reference)	0.93 (0.56, 1.55)	2.00 (0.99, 4.00)	-- ^b
Maternal disturbance of vascular integrity (MVI)				
All women (<i>n</i> =218 vs. 796)	1.00 (Reference)	1.67 (1.13, 2.48)	1.24 (0.63, 2.44)	-- ^b
Exclusion of high CRH (<i>n</i> =168 vs. 600)	1.00 (Reference)	1.72 (1.08, 2.74)	1.42 (0.66, 3.05)	-- ^b
Fetal disturbance of vascular integrity (FVI)				
All women (<i>n</i> =396 vs. 618)	1.00 (Reference)	2.17 (1.52, 3.10)	0.94 (0.52, 1.70)	3.49 (0.16, 77.51)
Exclusion of high CRH (<i>n</i> =308 vs. 460)	1.00 (Reference)	2.21 (1.44, 3.39)	0.79 (0.40, 1.56)	-- ^b
Maternal vascular developmental lesions (MVD)				
All women (<i>n</i> =136 vs. 878)	1.00 (Reference)	1.84 (1.09, 3.10)	1.53 (0.68, 3.45)	6.70 (0.25, 180.88)
Exclusion of high CRH (<i>n</i> =113 vs. 655)	1.00 (Reference)	1.91 (1.04, 3.52)	1.47 (0.62, 3.48)	-- ^b

a Estimates are derived from a multinomial logistic regression model that includes maternal pre-pregnancy BMI, race/ethnicity, hypertensive disorders of pregnancy, and smoking habits during pregnancy. Bolded values indicate statistical significance at alpha <0.05.

b Non-estimable value for SGA/preterm category due to sparse cell size.