

- 1 Supplementary Table 1. Gestational age-stratified associations between antenatal corticosteroid (ACS) exposure and neonatal outcomes.
- 2 Adjusted associations between ACS exposure and neonatal outcomes stratified by gestational age (<28, 28 to <32, and ≥32 weeks' gestation),
- 3 presented as adjusted odds ratios with 95% confidence intervals.

Outcomes	GA (weeks)	Comparison with no ACS (reference)	No exposure (n=3 111)	Incomplete exposure (n=6 272)	Complete exposure (n=8 005)	Crude model			Adjusted model*		
						OR (95% CI)	<i>p</i> value	† <i>p</i> -for-interaction	OR (95% CI)	<i>p</i> value	† <i>p</i> -for-interaction
Resuscitation								0.192			0.240
in the delivery room	<28	Incomplete	1 103	2 443	3 030	1.31 (0.66–2.62)	0.439		1.46 (0.73–2.92)	0.281	
		Complete				0.71 (0.39–1.31)	0.276		0.74 (0.40–1.37)	0.340	
	28 to <32	Incomplete	1 111	3 060	3 807	1.15 (0.91–1.44)	0.239		1.15 (0.92–1.45)	0.228	
		Complete				1.01 (0.81–1.26)	0.921		0.97 (0.78–1.21)	0.802	
	≥32	Incomplete	813	752	1 143	1.39 (1.12–1.71)	0.002		1.29 (1.04–1.60)	0.022	
		Complete				1.20 (0.99–1.45)	0.055		1.13 (0.93–1.37)	0.205	
Intubation								0.087			0.023
	<28	Incomplete	1 090	2 421	2 980	0.63 (0.49–0.81)	<.001		0.71 (0.55–0.92)	0.010	

		Complete				0.72 (0.56–0.92)	0.009		0.75 (0.58–0.96)	0.024
	28 to <32	Incomplete	994	2 775	3 410	0.55 (0.47–0.64)	<.001		0.54 (0.46–0.66)	<.001
		Complete				0.52 (0.45–0.60)	<.001		0.47 (0.40–0.55)	<.001
	≥32	Incomplete	513	529	769	0.69 (0.52–0.91)	0.008		0.64 (0.48–0.84)	0.002
		Complete				0.66 (0.51–0.85)	<.001		0.63 (0.48–0.81)	<.001
Chest compressions								0.096		0.077
	<28	Incomplete	1 090	2 421	2 980	0.40 (0.32–0.51)	<.001		0.44 (0.34–0.55)	<.001
		Complete				0.32 (0.26–0.41)	<.001		0.33 (0.27–0.42)	<.001
	28 to <32	Incomplete	994	2 775	3 410	0.29 (0.20–0.41)	<.001		0.29 (0.20–0.41)	<.001
		Complete				0.22 (0.16–0.32)	<.001		0.21 (0.15–0.30)	<.001
	≥32	Incomplete	513	529	769	0.97 (0.38–2.46)	0.948		0.88 (0.35–2.25)	0.793
		Complete				0.51 (0.19–1.39)	0.190		0.50 (0.18–1.34)	0.168
Epinephrine								0.008		0.008
	<28	Incomplete	1 090	2 421	2 980	0.44 (0.34–0.58)	<.001		0.49 (0.37–0.63)	<.001
		Complete				0.38 (0.29–0.49)	<.001		0.39 (0.30–0.51)	<.001
	28 to <32	Incomplete	994	2 775	3 410	0.28 (0.17–0.45)	<.001		0.28 (0.17–0.45)	<.001
		Complete				0.20 (0.12–0.33)	<.001		0.19 (0.12–0.32)	<.001

	≥32	Incomplete	513	529	769	2.20 (0.67–7.20)	0.191		2.00 (0.61–6.54)	0.253
		Complete				0.67 (0.17–2.67)	0.566		0.64 (0.16–2.56)	0.526
RDS								<.001		0.001
	<28	Incomplete	1 133	2 451	3 041	1.21 (0.77–1.99)	0.414		1.36 (0.86–2.14)	0.184
		Complete				0.73 (0.97–1.32)	0.135		0.79 (0.52–1.19)	0.252
	28 to <32	Incomplete	1 148	3 068	3 816	0.88 (0.74–1.05)	0.142		0.90 (0.75–1.07)	0.226
		Complete				0.62 (0.53–0.74)	<.001		0.61 (0.51–0.72)	<.001
	≥32	Incomplete	830	753	1 148	1.42 (1.13–1.78)	0.002		1.39 (1.10–1.75)	0.005
		Complete				1.09 (0.88–1.35)	0.438		1.08 (0.87–1.33)	0.514
PDA(treated)								0.323		0.270
	<28	Incomplete	890	2 043	2 511	0.92 (0.79–1.08)	0.320		0.91 (0.78–1.07)	0.244
		Complete				1.13 (0.97–1.32)	0.126		1.12 (0.96–1.31)	0.168
	28 to <32	Incomplete	1 000	2 708	3 386	1.04 (0.87–1.23)	0.691		1.06 (0.89–1.26)	0.528
		Complete				1.34 (1.13–1.59)	0.001		1.37 (1.15–1.62)	<.001
	≥32	Incomplete	785	697	1 078	0.73 (0.49–1.09)	0.124		0.74 (0.49–1.10)	0.005
		Complete				0.92 (0.63–1.35)	0.681		0.94 (0.64–1.38)	0.514
Moderate to severe BPD								0.173		0.155
	<28	Incomplete	681	1 776	2 360	0.75 (0.62–0.89)	0.001		0.73 (0.61–0.89)	0.002

		Complete				0.95 (0.80–1.13)	0.557		0.85 (0.71–1.03)	0.089
	28 to <32	Incomplete	1 079	2 948	3 716	0.81 (0.69–0.95)	0.010		0.76 (0.64–0.90)	0.002
		Complete				0.84 (0.71–0.98)	0.025		0.71 (0.60–0.84)	<.001
	≥32	Incomplete	742	735	1 134	0.83 (0.51–1.32)	0.425		0.70 (0.43–1.13)	0.147
		Complete				1.03 (0.69–1.55)	0.878		0.89 (0.59–1.35)	0.590
Pulmonary hypertension								0.112		0.012
	<28	Incomplete	1 133	2 451	3 041	1.02 (0.85–1.23)	0.834		1.17 (0.96–1.42)	0.114
		Complete				1.17 (0.98–1.40)	0.088		1.23 (1.02–1.48)	0.03
	28 to <32	Incomplete	1 148	3 068	3 816	0.83 (0.59–1.16)	0.279		0.80 (0.57–1.23)	0.201
		Complete				0.84 (0.61–1.17)	0.307		0.74 (0.53–1.03)	0.077
	≥32	Incomplete	830	753	1 148	0.86 (0.42–1.73)	0.662		0.73 (0.36–1.48)	0.381
		Complete				0.52 (0.25–1.10)	0.072		0.43 (0.21–0.88)	0.022
Sepsis								0.119		0.026
	<28	Incomplete	1 108	2 437	3 028	1.28 (1.10–1.50)	0.002		1.39 (1.18–1.62)	<.001
		Complete				1.10 (0.94–1.27)	0.239		1.14 (0.98–1.33)	0.089
	28 to <32	Incomplete	1 147	3 063	3 814	0.99 (0.81–1.20)	0.892		0.99 (0.82–1.22)	0.960
		Complete				0.92 (0.76–1.14)	0.387		0.90 (0.74–1.09)	0.263
	≥32	Incomplete	829	752	1 145	0.80 (0.51–1.27)	0.341		0.76 (0.48–1.21)	0.254

		Complete				1.00 (0.67–1.48)	0.990		0.97 (0.65–1.44)	0.87
IVH, Grade ≥ 3								0.742		0.776
	<28	Incomplete	954	2 307	2 891	0.67 (0.57–0.80)	<.001		0.68 (0.57–0.82)	<.001
		Complete					<.001		0.42 (0.35–0.50)	<.001
	28 to <32	Incomplete	1 127	3 038	3 797		0.020		0.67 (0.49–0.92)	0.013
		Complete					<.001		0.46 (0.33–0.64)	<.001
	≥ 32	Incomplete	823	746	1 145		0.232		1.22 (0.41–3.65)	0.751
		Complete					0.522		0.68 (0.22–2.13)	0.512
NEC, Stage \geq II								0.880		0.823
	<28	Incomplete	1 098	2 417	2 996		0.968		1.10 (0.88–1.36)	0.411
		Complete					0.506		0.98 (0.79–1.22)	0.875
	28 to <32	Incomplete	1 144	3 063	3 811		0.495		1.15 (0.80–1.66)	0.457
		Complete					0.975		0.97 (0.67–1.39)	0.859
	≥ 32	Incomplete	829	750	1 148		0.534		0.71 (0.30–1.67)	0.430
		Complete					>0.999		0.95 (0.46–1.96)	0.893
ROP, Grade ≥ 2								0.405		0.355
	<28	Incomplete	708	1 842	2 414		0.130		0.87 (0.72–1.05)	0.142
		Complete					0.604		0.84 (0.70–1.01)	0.056

	28 to <32	Incomplete	1 074	2 941	3 685	0.011	0.68 (0.53–0.86)	0.002
		Complete				0.019	0.64 (0.50–0.81)	<.001
	≥32	Incomplete	640	653	1 011	0.419	1.21 (0.51–2.88)	0.660
		Complete				0.662	1.04 (0.46–2.36)	0.922
Mortality							0.174	0.475
	<28	Incomplete	1 133	2 451	3 041	<.001	0.60 (0.51–0.70)	<.001
		Complete				<.001	0.43 (0.36–0.50)	<.001
	28 to <32	Incomplete	1 148	3 068	3 816	0.007	0.64 (0.46–0.87)	0.005
		Complete				<.001	0.36 (0.26–0.50)	<.001
	≥32	Incomplete	830	753	1 148	0.655	0.97 (0.44–2.16)	0.940
		Complete				0.322	0.53 (0.23–1.22)	0.135

4 *Adjusted model adjusted for gestational age, birth weight, infant sex, maternal hypertension, maternal diabetes, chorioamnionitis, and premature rupture of
5 membranes.

6 *RDS* Respiratory distress syndrome, *PDA* Patent ductus arteriosus, *BPD* Bronchopulmonary dysplasia, *IVH* Intraventricular hemorrhage, *NEC* Necrotizing
7 enterocolitis, *ROP* Retinopathy of prematurity.

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9 Supplementary Table 2. Associations between any antenatal corticosteroid (ACS) exposure and neonatal outcomes among infants born before
 10 25 weeks' gestation. Adjusted associations between any ACS exposure and neonatal outcomes among infants born before 25 weeks' gestation,
 11 comparing any ACS exposure with no exposure. Results are presented as adjusted odds ratios with 95% confidence intervals.

Outcomes	GA (weeks)	Comparison with no ACS (reference)	No (n=436)		Incomplete (n=639)		Complete (n=796)		Adjusted model*			
			N	event(%)	N	event(%)	N	event(%)	OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>
Resuscitation In the delivery room	21 to <23	Incomplete	80	(100)	62	(100)	33	(100)	-		-	
		Complete							-		-	
	23 to <25	Incomplete	345	(99.7)	574	(99.8)	762	(99.3)	1.67 (0.10–26.72)	0.719	1.29 (0.08–22.17)	
		Complete							0.44 (0.05–3.78)	0.455	0.177 (0.02–1.93)	0.155
Intubation	21 to <23	Incomplete	80	(97.5)	62	(95.2)	33	(100)	0.50 (0.08–3.12)	0.461	0.46 (0.07–2.91)	0.411
		Complete							-			
	23 to <25	Incomplete	344	(96.2)	573	(97.4)	757	(98.3)	1.46 (0.69–3.11)	0.325	1.52 (0.70–3.27)	0.288
		Complete							2.25 (1.03–4.90)	0.042	2.26 (1.01–5.07)	0.048
Chest compressions	21 to <23	Incomplete	80	(22.5)	62	(11.3)	33	(6.1)	0.44 (0.17–1.13)	0.087	0.42 (0.16–1.10)	0.076
		Complete							0.22 (0.05–1.02)	0.053	0.20 (0.04–0.93)	0.040

	23 to <25	Incomplete	344 (21.5)	573 (10.5)	757 (7.9)	0.43 (0.29–0.62)	<.001	0.44 (0.30–0.64)	<.001
		Complete				0.31 (0.22–0.45)	<.001	0.31 (0.21–0.45)	<.001
Epinephrine	21 to <23	Incomplete	80 (18.8)	62 (6.5)	33 (12.1)	0.30 (0.09–0.95)	0.041	0.29 (0.09–0.93)	0.037
		Complete				0.60 (0.18–1.96)	0.395	0.53 (0.16–1.75)	0.295
	23 to <25	Incomplete	344 (16.0)	573 (7.7)	757 (6.5)	0.44 (0.29–0.67)	<.001	0.44 (0.29–0.68)	<.001
		Complete				0.36 (0.24–0.55)	<.001	0.35 (0.23–0.53)	<.001
RDS	21 to <23	Incomplete	81 (97.5)	62 (96.8)	33 (97.0)	0.76 (0.10–5.55)	0.786	0.79 (0.11–5.87)	0.819
		Complete				0.81 (0.07–9.25)	0.865	0.74 (0.06–8.67)	0.809
	23 to <25	Incomplete	355 (97.7)	577 (99.0)	763 (98.0)	2.19 (0.76–6.38)	0.149	2.22 (0.76–6.53)	0.147
		Complete				1.15 (0.48–2.74)	0.753	1.13 (0.46–2.76)	0.787
PDA(treated)	21 to <23	Incomplete	62 (87.1)	43 (81.4)	24 (75.0)	0.65 (0.22–1.89)	0.426	0.59 (0.20–1.72)	0.329
		Complete				0.44 (0.14–1.45)	0.180	0.37 (0.11–1.23)	0.106
	23 to <25	Incomplete	267 (55.8)	454 (54.4)	625 (57.1)	0.95 (0.70–1.28)	0.715	0.98 (0.72–1.34)	0.901
		Complete				1.06 (0.79–1.10)	0.717	1.05 (0.77–1.42)	0.763
BPD (Moderate to severe)	21 to <23	Incomplete	8 (87.5)	16 (100)	9 (88.9)	-	-	-	-
		Complete				-	-	-	-
	23 to <25	Incomplete	136 (82.4)	295 (79.7)	439 (80.1)	0.84 (0.50–1.42)	0.512	0.82 (0.48–1.41)	0.475
		Complete				0.87 (0.53–1.43)	0.575	0.76 (0.45–1.28)	0.302

Pulmonary hypertension	21 to <23	Incomplete	81 (30.9)	62 (38.7)	33 (45.5)	1.42 (0.71–2.84)	0.328	1.44 (0.71–2.92)	0.310
		Complete				1.87 (0.81–4.29)	0.141	1.77 (0.76–4.14)	0.185
	23 to <25	Incomplete	355 (24.2)	577 (26.9)	763 (32.2)	1.15 (0.85–1.56)	0.372	1.17 (0.86–1.60)	0.325
		Complete				1.49 (1.12–1.98)	0.007	1.44 (1.07–1.93)	0.017
Sepsis	21 to <23	Incomplete	75 (24.0)	59 (45.8)	33 (36.4)	2.67 (1.28–5.58)	0.009	2.69 (1.28–5.64)	0.009
		Complete				1.81 (0.75–4.39)	0.189	1.92 (0.79–4.70)	0.152
	23 to <25	Incomplete	341 (32.0)	571 (38.4)	755 (40.3)	1.32 (0.99–1.76)	0.052	1.31 (0.99–1.75)	0.062
		Complete				1.44 (1.10–1.88)	0.009	1.42 (1.08–1.87)	0.014
IVH, Grade ≥ 3	21 to <23	Incomplete	46 (43.5)	43 (44.2)	25 (40.0)	1.03 (0.45–2.38)	0.946	1.03 (0.44–2.39)	0.952
		Complete				0.87 (0.32–2.33)	0.777	0.82 (0.30–2.22)	0.692
	23 to <25	Incomplete	267 (42.7)	517 (37.9)	689 (25.8)	0.82 (0.61–1.11)	0.194	0.79 (0.59–1.08)	0.139
		Complete				0.47 (0.35–0.63)	<.001	0.46 (0.34–0.63)	<.001
NEC Stage \geq II	21 to <23	Incomplete	77 (10.4)	57 (19.3)	32 (21.9)	2.06 (0.77–5.52)	0.149	2.09 (0.78–5.62)	0.142
		Complete				2.42 (0.79–7.35)	0.120	2.60 (0.85–7.97)	0.095
	23 to <25	Incomplete	338 (15.7)	560 (17.1)	742 (19.0)	1.11 (0.77–1.61)	0.568	1.11 (0.77–1.61)	0.583
		Complete				1.26 (0.89–1.78)	0.188	1.28 (0.90–1.83)	0.169
ROP,	21 to <23	Incomplete	9 (66.7)	18 (88.9)	10 (90.0)	4.00 (0.53–30.16)	0.179	2.89 (0.36–23.32)	0.319

Grade ≥ 2		Complete					4.50 (0.37–54.15)	0.236	2.93 (0.23–37.46)	0.409
	23 to <25	Incomplete	152 (77.6)	315 (80.3)	463 (81.0)		1.18 (0.73–1.89)	0.501	1.30 (0.69–1.83)	0.635
		Complete					1.23 (0.79–1.92)	0.368	1.09 (0.68–1.74)	0.723
Mortality	21 to <23	Incomplete	81 (88.9)	62 (79.0)	33 (72.7)		0.47 (0.19–1.19)	0.111	0.43 (0.17–1.12)	0.084
		Complete					0.33 (0.12–0.94)	0.037	0.26 (0.09–0.74)	0.012
	23 to <25	Incomplete	355 (62.3)	577 (48.2)	763 (43.9)		0.56 (0.43–0.74)	<.001	0.56 (0.42–0.75)	<.001
		Complete					0.48 (0.37–0.61)	<.001	0.45 (0.34–0.59)	<.001

12 *Adjusted model adjusted for gestational age, birth weight, infant sex, maternal hypertension, maternal diabetes, chorioamnionitis, and premature rupture of
13 membranes.

14 *RDS* Respiratory distress syndrome, *PDA* Patent ductus arteriosus, *BPD* Bronchopulmonary dysplasia, *IVH* Intraventricular hemorrhage, *NEC* Necrotizing
15 enterocolitis, *ROP* Retinopathy of prematurity.