

**Online supplementary table 5.** Univariable and multivariable generalised linear mixed models for the associations between neonatal hyperglycaemia (>12 and >14 mmol/L) and Wechsler Intelligence Scale for Children IV (WISC-IV) score at 6.5 years of age in children born extremely preterm.

Hyperglycaemia definition	Mean WISC-IV score		Univariable		Multivariable		
	No hyperglycaemia (n)	Hyperglycaemia (n)	Difference in mean scores (95% CI)	P value	Difference in mean scores (95% CI)	P value	
<b>&gt;12 mmol/L</b>	at least once	86.03 (177)	81.98 (178)	-4.05 (-7.04 to -1.06)	0.008	-1.07 (-4.10 to 1.96)	0.487
	on $\geq 2$ consecutive days	85.24 (262)	80.50 (93)	-4.74 (-8.17 to -1.32)	0.007	-1.43 (-4.87 to 2.02)	0.417
	on $\geq 3$ consecutive days	84.78 (314)	78.12 (41)	-6.66 (-11.21 to -2.11)	0.004	-2.07 (-6.57 to 2.44)	0.368
	Days with hyperglycaemia (per 1 day increase)	-	-	-0.78 (-1.24 to -0.32)	0.001	-0.22 (-0.72 to 0.28)	0.383
<b>&gt;14 mmol/L</b>	at least once	86.14 (222)	80.45 (133)	-5.70 (-8.74 to -2.65)	<0.001	-2.88 (-5.97 to 0.20)	0.067
	on $\geq 2$ consecutive days	84.91 (299)	79.12 (56)	-5.79 (-9.76 to -1.82)	0.004	-1.41 (-5.37 to 2.56)	0.486
	on $\geq 3$ consecutive days	84.45 (334)	76.85 (21)	-7.60 (-13.81 to -1.40)	0.017	-4.13 (-10.21 to 1.96)	0.183

Hyperglycaemia definition	Mean WISC-IV score		Univariable	Multivariable		
	No hyperglycaemia (n)	Hyperglycaemia (n)	Difference in mean scores (95% CI)	P value	Difference in mean scores (95% CI)	P value
Days with hyperglycaemia (per 1 day increase)	-	-	-1.00 (-1.63 to -0.37)	0.002	-0.40 (-1.05 to 0.24)	0.222

A random intercept was used to account for the clustering effect of twins/triplets. Adjusted for gestational age at birth, sex, occurrence of intraventricular haemorrhage grade 3-4 and/or periventricular leukomalacia, durations of mechanical ventilation and steroid treatments during the first 14 postnatal days, surgery due to patent ductus arteriosus or necrotising enterocolitis during the first 14 postnatal days, number of culture-verified sepsis episodes during the first 14 postnatal days, and educational status of the mother.