SUPPLEMENTARY TABLES

1

Supplementary Table 1: Correlations between early growth (change in weight z-score up to 50 weeks postmenstrual age) and anthropometric z-scores at one year, using Fenton growth chart and the INTERGROWTH-21ST Postnatal Growth Standards for Preterm Infants

		Change in weight z-score: birth to PMA50 † (ΔWZ)									
		Whole sample		AGA ‡ only				SGA ‡ only			
		Fenton	IG-PPGS	Fenton		IG-PPGS		Fenton		IG-PPGS	
	N§	r ††	r ‡‡	n	r ††	n	r ‡‡	n	r ††	n	r ††
WAZ ¶	319	0.44 ***	0.24 ***	216	0.41 ***	208	0.34 ***	103	0.43 ***	111	0.28 **
LAZ ¶	318	0.40 ***	0.23 ***	216	0.35 ***	208	0.28 ***	102	0.43 ***	110	0.35 ***
WLZ	318	0.35 ***	0.18 **	216	0.34 ***	208	0.28 ***	102	0.29 **	110	0.14
BMIZ ¶	318	0.34 ***	0.18 **	216	0.32 ***	208	0.28 ***	102	0.27 **	110	0.13

** p < 0.05; ** p < 0.01; *** p < 0.001.*

† PMA50: the latest recorded visit up to 50 weeks postmenstrual age.

‡ infants classified as AGA/SGA using the INTERGROWTH-21st Newborn Size Standards for correlations with IG-PPGS, and the Fenton growth chart for correlations with Fenton.

§ 3 infants excluded: gestational age at birth fell outside the range of IG-PPGS. Length was only available for 318 infants.

¶ All age-specific z-scores calculated using corrected age.

†† Pearson correlation coefficient – all variables normally distributed.

‡‡ Spearman correlation coefficient – one or both variables not normally distributed.

Abbreviations: Fenton = Fenton 2013 Growth Chart; IG-PPGS = INTERGROWTH-21st Postnatal Growth Standards for Preterm Infants; WAZ = weight-for-age z-score; LAZ = length-for-age z-score; WLZ = weight-for-length z-score; BMIZ = body mass index (BMI)-for-age z-score.

Supplementary Table 2: Occurrence of malnutrition at one year among infants gaining or losing more or less than one weight z-score unit from birth up to 50 weeks PMA, using the Fenton Growth Chart and INTERGROWTH-21ST Growth Standards.

			ΔWZ†: Fenton		p-value ‡	ΔWZ†: IG-PPGS		p-value ‡
			ΔWZ < -1	**ΔWZ ≥ -1**		**ΔWZ < -1**	**ΔWZ ≥ -1**	
Underweight (WAZ < -2)	**All**	**Yes**	21	29	< 0.001	18	32	0.026
		No	47	222		55	214	
	AGA §	**Yes**	7	9	0.018	9	5	0.002
		No	33	167		44	150	
	SGA §	**Yes**	14	20	0.045	9	27	0.288
		No	14	55		11	64	
			ΔWZ < -1	**ΔWZ ≥ -1**		**ΔWZ < -1**	**ΔWZ ≥ -1**	
Stunted (LAZ < -2)	**All**	**Yes**	19	38	0.024	19	38	0.060
		No	49	212		54	207	
	AGA §	**Yes**	7	17	0.252	9	10	0.043
		No	33	159		44	145	
	SGA §	**Yes**	12	21	0.247	10	28	0.178
		No	16	53		10	62	
			ΔWZ < -1	**ΔWZ ≥ -1**		**ΔWZ < -1**	**ΔWZ ≥ -1**	
Wasted (WLZ < -2)	**All**	**Yes**	10	13	0.016	9	14	0.097
		No	58	237		64	231	
	AGA §	**Yes**	3	7	(0.398) d	6	3	(0.009) d
		No	37	169		47	152	
	SGA §	**Yes**	7	6	0.051	3	11	(0.717) d
		No	21	68		17	79	
			ΔWZ > +1	**ΔWZ ≤ +1**		**ΔWZ > +1**	**ΔWZ ≤ +1**	
Overweight (BMIZ > +2)	**All**	**Yes**	12	9	< 0.001	8	13	0.003
		No	36	261		37	260	
	AGA §	**Yes**	12	6	< 0.001	7	10	< 0.001
		No	28	170		16	175	
	SGA §	**Yes**	0	3	(> 0.999) ¶	1	3	(> 0.999) ¶
		No	8	91		21	85	

N=319: 3 infants excluded: gestational age at birth fell outside the range of IG-PPGS. Length measurement was only available for 318 infants.

† ΔWZ: change in weight-for-PMA z-score from birth to the last recorded measurement up to 50 weeks PMA.

‡ All p-values calculated using Chi squared test unless otherwise indicated.

§ Infants classified as AGA/SGA using the INTERGROWTH-21st Newborn Size Standards for comparisons with ΔWZ from IG-PPGS, and the Fenton growth chart for comparisons with ΔWZ from Fenton.

¶ Fisher's exact test (small sample size in one/more sub-groups – cautious interpretation necessary).

Abbreviations: ΔWZ = Change in weight z-score between birth and ≤ 50 weeks; WAZ = weight-for-age z-score; LAZ = length-for-age z-score; WLZ = weight-for-length z-score; BMIZ = BMI-for-age z-score; Fenton = Fenton 2013 growth chart; IG-PPGS = INTERGROWTH-21st Postnatal Growth Standards for Preterm Infants.