

Supplementary Table 1. Parameters of severity index (two-parameter logistic Rasch model) comprising problematic characteristics until 1 year of corrected age.

No	Parameter	Criterion	Difficulty	Discrimination
1	Multiple pregnancy	Yes	-5.20	-0.31
2	Preterm	< 37 weeks of gestational age	-1.51	2.09
3	Intrauterine growth retardation	Yes	-0.59	-1.00
4	Gestational age at birth	≤ 34 weeks	-0.38	1.65
5	Acute suffering	Yes	-0.35	0.32
6	Neonatal hospital stays	Yes, with or without intensive care unit	-0.26	4.36
7	Pathological jaundice	Yes	0.42	4.14
8	Aminoglycosides	Yes	0.53	3.25
9	Mechanical ventilation (days)	≥ 1 day	1.38	3.41
10	Birthweight	< 1500 g	1.48	1.64
11	Intensive care unit (days)	≥ 15 days	2.03	3.56
12	Extrauterine adaptation	Not spontaneous	2.10	0.74
13	Nosocomial infection	Yes	2.75	1.34
14	Periventricular leukomalacia	Yes	2.77	1.79
15	Severe bilateral visual or audition deficit	Yes	3.24	0.87
16	Ophthalmological examination at 1 year	No regressive retinopathy of prematurity	3.42	1.76
17	Toxaemia during pregnancy	Yes	3.84	0.08
18	Neurological examination at 20 years	Abnormal with functional deficit	3.84	0.94
19	Cerebral palsy at 1 year	Yes	4.28	1.03
20	Neurological examination at 1 year	Abnormal	5.26	0.96
21	First child	Yes	5.61	0.03
22	Audition examination at 1 year	Bilateral deficit	9.84	0.48

Instead of adjusting for potential individual confounders of the association between exposure and outcome, a Rasch model was fitted to estimate the overall degree of vulnerability (fragility index) attributable to the factors present before allocation in the original sample of 746 participants. 15 unevenly distributed binary indicators of harm during pregnancy, birth or the neonatal period before randomisation were selected, according to individual factorial scores. This assumed that a joint latent variable measured the non-specific fragility of an infant. Seven retrospective measures, namely binary indicators, were added to account for additional imbalances in the risk factors arising from the survival cohort effect in the 441-re-enrolled survivors who weighed up to 1800g. These were added to cover any damage that occurred during the perinatal period. The new items were retrospective measures that are listed in Table 1: indicators 16, 19, 20 and 22 at 1 year of age and indicators 15 and 18 at 20 years. The 22 binary items provided a score that represented a severity index. This provided a composite variable that represented the joint potential for confounding and was used as a covariate in the adjusted analyses.