

Table B: Multivariate association of a) BPD, defined as oxygen supplementation for ≥ 28 days of life, and its severity defined at b) 36 and c) 40 weeks' PMA and neurodevelopmental impairment at mean (SD) corrected age 23.1 (3.6) months adjusted for risk factors for poorer neurodevelopmental outcome in preterm infants.

a)

	No BPD Reference N=253	BPD N=357	OR (95% CI)	p-value
NDI N (%)	32 (13%)	66 (18%)	1.5 (0.8, 3.1)	0.172
Cerebral palsy N (%)	9 (3%)	5 (1.4%)	0.6 (0.0, 5.7)	0.963
Deafness N (%)	2 (0.8%)	3 (0.8%)	0.9 (0.2, 5.2)	0.963
Blindness N (%)	0	2 (0.6%)	-	N.A.

b)

	No BPD Reference N=253	Mild BPD at 36 PMA N=215	OR (95% CI)	p-value	Moderate BPD at 36 PMA N=91	OR (95% CI)	p-value	Severe BPD at 36 PMA N=51	OR (95% CI)	p-value
NDI N (%)	32 (13%)	29 (13%)	1.4 (0.6, 3.2)	0.417	21 (23%)	1.8 (0.7, 4.4)	0.201	16 (31%)	5.1 (1.5, 17.4)	0.008
Cerebral palsy N (%)	9 (3%)	3 (1%)	0.3 (0.0, 2.8)	0.324	2 (2%)	0.1 (0.0, 2.1)	0.997	0	-	N.A.
Deafness N (%)	2 (0.8%)	1 (0.5%)	0.00	0.998	0	-	N.A.	2 (4%)	6.3 (0.0, 490.6)	0.410
Blindness N (%)	0	1 (0.5%)	-	N.A.	1 (1%)	-	N.A.	0	-	N.A.

c)

	No BPD Reference N=253	Mild BPD at 40 PMA N=304	OR (95% CI)	p-value	Moderate BPD at 40 PMA N=27	OR (95% CI)	p-value	Severe BPD at 40 PMA N=23	OR (95% CI)	p-value
NDI N (%)	32 (13%)	46 (15%)	1.4 (0.7, 2.8)	0.379	6 (22%)	3.8 (0.8, 18.3)	0.096	14 (61%)	17.5 (3.3, 91.7)	0.001
Cerebral palsy N (%)	9 (3%)	5 (2%)	0.7 (0.6, 6.0)	0.158	0	-	N.A.	0	-	N.A.
Deafness N (%)	2 (0.8%)	1 (0.3%)	0.00	0.978	1 (4%)	0.00	0.995	1 (4%)	0.00	0.987
Blindness N (%)	0	2 (1%)	-	N.A.	0	-	N.A.	0	-	N.A.

NDI, neurodevelopmental impairment; BPD, bronchopulmonary dysplasia; PMA, postmenstrual age; OR, odds ratio; 95% CI, 95% confidence interval; 'No BPD' used as reference for groups comparison (i.e. versus Mild, versus Moderate, and versus Severe BPD forms, respectively); logistic regression models adjusted for gestational age, sex, necrotizing enterocolitis, intraventricular hemorrhage >grade 2, cystic periventricular leukomalacia, persistent ductus arteriosus, sepsis, socioeconomic score.

b) Hosmer and Lemeshow test: Chi-square 10.032, df 8, p=0.263; Area under the receiver operating curve (95%-CI): 0.802 (0.725-0.880), SE 0.040, p<0.001; c) Hosmer and Lemeshow test: Chi-square 4.853, df 8, p=0.773; Area under the receiver operating curve (95%-CI): 0.976 (0.957-0.996), SE 0.010, p<0.001.