

**Table A: Multivariate association of a) BPD, defined as oxygen supplementation for  $\geq 28$  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. Sensitivity analyses including only infants assessed with Bayley-II (N=460).**

**a)**

	No BPD Reference N=193	BPD N=267	OR (95% CI)	p-value
<b>NDI N (%)</b>	33 (17%)	111 (42%)	1.6 (0.8, 3.1)	0.172

**b)**

	No BPD Reference N=193	Mild BPD at 36 PMA N=162	OR (95% CI)	p-value	Moderate BPD at 36 PMA N=61	OR (95% CI)	p-value	Severe BPD at 36 PMA N=44	OR (95% CI)	p-value
<b>NDI N (%)</b>	33 (17%)	46 (28%)	1.7 (0.9, 3.1)	0.758	26 (43%)	2.3 (1.0, 5.0)	0.041	19 (43%)	3.6 (1.2, 10.2)	0.017

**c)**

	No BPD Reference N=193	Mild BPD at 40 PMA N=222	OR (95% CI)	p-value	Moderate BPD at 40 PMA N=24	OR (95% CI)	p-value	Severe BPD at 40 PMA N=18	OR (95% CI)	p-value
<b>NDI N (%)</b>	33 (17%)	67 (30%)	1.6 (0.9, 2.8)	0.080	10 (42%)	2.7 (0.8, 8.8)	0.100	14 (78%)	18.0 (3.6, 90.0)	< 0.001

BPD, bronchopulmonary dysplasia; NDI, neurodevelopmental impairment; 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, birthweight z-score, intraventricular hemorrhage > grade 2, persistent ductus arteriosus, days of mechanical ventilation, surfactant, sepsis.