

Table 4E: Spirometric lung function data expressed as percentage predicted from 10 to 25 years of age for 83 subjects born extremely preterm (EP) with and without neonatal bronchopulmonary dysplasia (BPD) and 81 term-born control subjects.

		1991-92 cohort.			1982-85 cohort.		
		Development from childhood to adolescence			Development from adolescence to adulthood		
Examination		First	Second		First	Second	
Age (years), mean (SD)		10.5 (0.4)	17.8 (0.4)		17.7 (1.2)	24.9 (1.2)	
		% predicted	% predicted	Difference	% predicted	% predicted	Difference
FEV ₁ mean (95% CI)	Control	99.3 (96.2, 102.4)	99.7 (96.1, 103.3)	0.4 (-2.1, 2.9)	102.5 (98.1, 106.8)	99.9 (95.8, 104.0)	-2.6 (-4.7, -0.5)
	EP non BPD	96.8 (90.7, 103.0)	98.6 (91.5, 105.8)	1.8 (-3.2, 6.8)	95.4 (86.4, 104.3)	94.1 (85.8, 102.3)	-1.3 (-5.4, 2.9)
	EP mild BPD	90.8 (85.9, 95.7)	92.8 (87.2, 98.4)	2.0 (-1.9, 5.8)	85.8 (79.8, 91.8)	88.3 (82.6, 93.9)	2.5 (-0.3, 5.2)
	EP m/s BPD	82.7 (77.4, 88.1)	85.3 (79.4, 91.2)	2.5 (-1.3, 6.4)	84.4 (76.2, 92.6)	84.6 (76.9, 92.3)	0.2 (-3.7, 4.1)
	Control vs. EP no BPD †	-2.5 (-9.4, 4.4)	-1.1 (-9.1, 7.0)		-7.1 (-17.1, 2.8)	-5.8 (-15.1, 3.4)	
	Control vs. EP mild BPD †	-8.5 (-14.3, -2.7)	-6.9 (-13.6, -0.2)	P = 0.763	-16.7 (-24.1, -9.2)	-11.6 (-18.6, -4.6)	P = 0.042
	Control vs. EP m/s BPD †	-16.6 (-22.8, -10.4)	-14.4 (-21.3, -7.5)		-18.1 (-27.4, -8.8)	-15.3 (-24.0, -6.6)	

FVC mean (95% CI)	Control	98.6 (95.6, 101.7)	99.2 (95.9, 102.6)	0.6 (-1.9, 3.1)	98.3 (93.8, 102.9)	100.1 (95.8, 104.3)	1.7 (-0.5, 3.9)
	EP non BPD	95.5 (89.5, 101.6)	99.5 (92.9, 106.1)	4.0 (-1.1, 9.0)	99.5 (90.1, 109.0)	103.0 (94.5, 111.6)	3.5 (-0.89, 7.9)
	EP mild BPD	92.6 (87.8, 97.5)	93.7 (88.5, 98.8)	1.0 (-2.9, 4.9)	86.1 (79.8, 92.4)	93.1 (87.2, 98.9)	7.0 (4.0, 9.9)
	EP m/s BPD	92.7 (87.5, 98.0)	98.4 (93.0, 103.8)	5.7 (1.7, 9.6)	88.7 (80.0, 97.3)	92.8 (84.9, 100.7)	4.1 (-0.04, 8.3)
	Control vs. EP no BPD †	-3.1 (-9.9, 3.7)	0.3 (-7.1, 7.7)		1.2 (-9.3, 11.7)	3.0 (-6.6, 12.6)	
	Control vs. EP mild BPD †	-6.0 (-11.8, -0.3)	-5.6 (-11.7, 0.6)	P = 0.150	-12.2 (-20.0, -4.4)	-7.0 (-14.2, 0.3)	P = 0.051
	Control vs. EP m/s BPD †	-5.9 (-12.0, 0.2)	-0.9 (-7.2, 5.5)		-9.7 (-19.5, 0.1)	-7.3 (-16.3, 1.8)	
FEV₁/FVC mean (95% CI)	Control	99.5 (97.1, 101.9)	99.2 (96.1, 102.3)	-0.4 (-2.4, 1.6)	103.0 (100.7, 105.3)	99.2 (96.9, 101.5)	-3.8 (-5.4, -2.3)
	EP non BPD	100.7 (96.0, 105.5)	98.1 (92.0, 104.3)	-2.6 (-6.7, 1.4)	95.0 (90.3, 99.8)	90.2 (85.6, 94.9)	-4.8 (-8.0, -1.6)
	EP mild BPD	97.7 (93.9, 101.5)	98.7 (93.9, 103.5)	1.0 (-2.1, 4.1)	99.4 (96.2, 102.5)	94.2 (91.0, 97.4)	-5.1 (-7.3, -3.0)
	EP m/s BPD	88.4 (84.3, 92.5)	85.8 (80.7, 90.9)	-2.6 (-5.7, 0.5)	95.0 (90.6, 99.4)	91.6 (87.2, 95.9)	-3.4 (-6.5, -0.4)
	Control vs. EP no BPD †	1.2 (-4.1, 6.5)	-1.1 (-8.0, 5.8)		-8.0 (-13.3, -2.7)	-9.0 (-14.2, -3.8)	
	Control vs. EP mild BPD †	-1.8 (-6.3, 2.7)	-0.5 (-6.2, 5.3)	P = 0.305	-3.6 (-7.6, 0.3)	-5.0 (-8.9, -1.0)	P = 0.714
	Control vs. EP m/s BPD †	-11.1 (-15.9, -6.4)	-13.3 (-19.3, -7.4)		-8.1 (-13.0, -3.1)	-7.6 (-12.6, -2.7)	

FEF25-75 mean (95% CI)	Control	97.4 (90.9, 103.9)	98.7 (91.3, 106.0)	1.3 (-3.1, 5.7)	112.6 (105.9, 119.3)	101.5 (94.9, 108.2)	-11.1 (-15.4, -6.8)
	EP non BPD	92.8 (80.0, 105.6)	95.1 (80.6, 109.7)	2.4 (-6.4, 11.21)	86.5 (72.6, 100.5)	74.4 (70.0, 87.9)	-12.1 (-21.1, -3.1)
	EP mild BPD	81.6 (71.4, 91.9)	91.7 (80.2, 103.2)	10.1 (3.4, 16.8)	85.4 (76.1, 94.7)	78.7 (69.7, 87.8)	-6.7 (-12.5, -0.9)
	EP m/s BPD	61.6 (50.6, 72.7)	66.9 (54.8, 79.0)	5.3 (-1.5, 12.0)	75.5 (62.7, 88.3)	72.9 (60.5, 85.2)	-2.6 (-10.8, 5.5)
	Control vs. EP no BPD †	-4.6 (-19.0, 9.7)	-3.5 (-19.8, 12.7)		-26.1 (-41.5, -10.6)	-27.1 (-42.1, -12.1)	
	Control vs. EP mild BPD †	-15.8 (-27.9, -3.6)	-6.9 (-20.6, 6.7)	P = 0.174	-27.2 (-38.6, -15.7)	-22.8 (-34.0, -11.5)	P = 0.230
	Control vs. EP m/s BPD †	-35.7 (-48.6, -22.9)	-31.8 (-45.9, -17.6)		-37.1 (-51.6, -22.7)	-28.6 (-42.7, -14.6)	

Figures are group mean percentages of predicted (16) with 95% confidence intervals (CI) or group mean differences with 95% CI, except for age (mean value with standard deviations). P-values assess differences between the three subgroups with respect to development from the first to the second examination (mixed linear model of SPSS, tests of group vs. examination interaction). “Differences” denotes mean change from first to second examination. † denotes differences between the control groups and the respective BPD subgroups. *Abbreviations:* FEV₁: forced expiratory volume in first second; FVC: forced vital capacity; FEF25-75: forced expiratory flow at 25-75% of FVC, EP = subjects born extreme preterm, i.e. with a gestational age ≤ 28 weeks or a birth weight ≤ 1000 gram, BPD = bronchopulmonary dysplasia, mild BPD = oxygen supplement at 28 postnatal days, m/s BPD = moderate/severe BPD, i.e. oxygen supplement at gestational age 36 weeks.