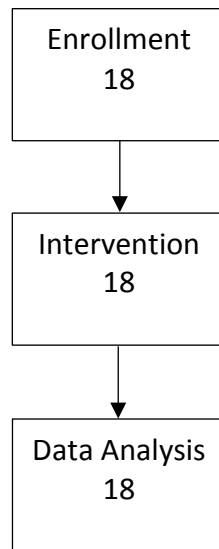


Participant Flow



Baseline Characteristics

Male	
Gestational age (weeks)	26 (24 – 30)
Birthweight (grams)	814 (438 – 1190)
Postnatal age at study (days)	18 (7 – 60)
Antenatal steroids	15 (83)
Postnatal surfactant	18 (100)
Bronchopulmonary dysplasia at 28 days	18 (100)
Bronchopulmonary dysplasia – mild (%)	3 (17)*
Bronchopulmonary dysplasia – moderate (%)	6 (34)*
Bronchopulmonary dysplasia – severe (%)	8 (47)*

Data presented as number (percentage) or median (range)

*One infant died before 36 weeks corrected gestation and therefore it was not possible to determine BPD severity

Outcome Measures

Primary outcome – work of breathing as assessed by the pressure time product of the diaphragm

	baseline	4ml/kg	5ml/kg	6ml/kg	7ml/kg
PTPdi (cmH₂O.sec/min)	106 (31)	177 (67)	127 (41)	101 (31)	78 (20)

Results are given as the mean (standard deviation)

Secondary outcomes

	Baseline	4ml/kg	5ml/kg	6ml/kg	7ml/kg
Expiratory tidal volume (ml/kg)	5.8 (0.6)	4.7 (0.4)	5.3 (0.4)	6.3 (0.4)	7.0 (0.5)
Peak inspiratory pressure (cmH₂O)	19.7 (3.7)	12.6 (3.1)	15.5 (4.1)	19.4 (4.4)	24.3 (3.8)
Spontaneous respiratory rate (breaths/minute)	54 (10)	61 (10)	56 (15)	51 (16)	44 (9)
Minute volume (ml/kg/min)	319 (71)	286 (46)	297 (88)	330 (109)	313 (68)
Fraction inspired oxygen	35 (10)	38 (12)	35 (10)	34 (10)	34 (10)

Results are given as the mean (standard deviation)

Adverse Events

There were no adverse events associated with this trial