

Table 1 Demographic, neonatal, maternal, and ventilation-associated data by study group before matching

Variable	Extubation failure (n=24)	Extubation success (n=105)	P value
Characteristics of neonate			
Male sex, n (%)	18 (75%)	58 (55.2%)	0.082
Gestational age, weeks, median (SD)	27.7 (1.4)	29.8 (1.7)	0.000
Birth weight, grams, median (SD)	988.6 (257)	1388.2 (358)	0.000
Intrauterine growth retardation, n (%)	4 (16.7%)	4 (3.8%)	0.034
Apgar score at 1 min, median (IQR)	3.79 (2-5)	4.54 (1-8)	0.006
Apgar score at 5 min, median (IQR)	5.71 (4-7)	6.50 (3-9)	0.001
Surfactant use, median (IQR)	1.42 (1-3)	1.24 (0-3)	0.208
Inotropic use within 7 days of age, n (%)	22 (91.7%)	55 (52.3%)	0.000
PDA, n (%)	14 (58.3%)	27 (25.7%)	0.025
PPHN, n (%)	4 (16.7%)	6 (5.7%)	0.115
HD of full feeding, days, median (IQR)	29.7 (6-70)	14.2 (3-66)	0.000
RSS			
Birth, median (IQR)	3.29 (1.55-15.00)	2.50 (1.50-7.20)	0.167
1 day of age, median (IQR)	2.87 (1.40-15.00)	2.30 (0-16.0)	0.208
3 days of age, median (IQR)	2.67 (1.27-10.50)	1.90 (0-16.0)	0.104

1 week of age, median (IQR)	2.50 (1.42-6.00)	1.13 (0-5.68)	0.000
2 weeks of age, median (IQR)	2.51 (1.38-4.50)	0.88 (0-9.60)	0.000
3 weeks of age, median (IQR)	2.54 (1.48-4.00)	1.47 (0-5.70)	0.000
4 weeks of age, median (IQR)	2.92 (0-5.28)	0.74 (0-9.0)	0.000
Pre-extubation			
HD, days, median (IQR)	25.6 (3-81)	13.60 (0-106)	0.012
Corrected age, weeks, median (IQR)	31.3 (26-39)	31.7 (27.6-41.0)	0.536
Body weight, gram, median (IQR)	1374.6 (668-3042)	1526.8 (900-2605)	0.240
Use for the systemic steroid use for extubation, n (%)	23 (95.8%)	22 (21.0%)	0.000
pH, median (IQR)	7.32 (7.07-7.55)	7.37 (7.16-7.58)	0.017
PCO ₂ , median (IQR)	42.0 (19.2-59.6)	36.1 (18.0-61.6)	0.018
RSS, median (IQR)	1.88 (1.47-2.39)	1.77 (1.24-2.80)	0.094
Oxygen supply after extubation			
Nasal CPAP, n (%)	11 (45.8%)	21 (20%)	0.025
HFNC, n (%)	13 (54.2%)	84 (80%)	
Outcome			
BPD severity			0.000
None	0	47 (44.8%)	
Mild, n (%)	6 (25%)	29 (27.6%)	
Moderate, n (%)e	4 (16.7%)	18 (17.1%)	
Severe, n (%)	14 (58.3%)	11 (10.5%)	
IVH, n (%)	2 (8.3)	4 (3.8%)	0.432

ROP, n (%)	12 (50%)	26 (24.8%)	0.043
Duration of oxygen supply, days, median (IQR)	92.9 (48-275)	47.0 (27-110)	0.000
Tracheostomy, n (%)	1 (4.2%)	0	0.049
Home oxygen, n (%)	3 (12.5%)	1 (0.9%)	0.006
HD at discharge, days, median (IQR)	103.4 (57-254)	64.6 (31-193)	0.000
Corrected age at discharge, weeks, median (IQR)	42.5 (37-64)	38.6 (35.7-53.4)	0.001
Body weight at discharge, grams, median (IQR)	3209.2 (2200-6150)	2812.1 (2070-4350)	0.043

Maternal and prenatal care information

Age, median (IQR)	33.8 (26-41)	34.0 (22-41)	0.862
Chorioamnionitis, n, (%)	10 (41.7%)	33 (31.4%)	0.817
PROM, n (%)	7 (29.2%)	40 (38.1%)	0.016
Antenatal steroid	0.71 (0-1)	0.92 (0-2)	0.455

BPD, bronchopulmonary dysplasia; CPAP, continuous positive airway pressure; HD, hospital day, HFNC, high-flow nasal cannula; IVH, intraventricular hemorrhage; PDA, patent ductus arteriosus; PPHN, pulmonary hypertension of newborn; PROM, premature rupture of membrane; ROP, retinopathy of prematurity; RSS, respiratory severity score
Values are shown as n (%), mean (standard deviation), or median (interquartile range)