

Table 2. PROP Infants' Characteristics by BPD36 (modified Shennan[^])

Risk Factor	BPD36 Yes (n=312)	BPD36 NO (n=431)	P value
Gestational age (weeks)*	26.2 (1.38)	27.0 (1.34)	<0.0001
Birthweight (grams)*	828 (197)	978 (233)	<0.0001
Sex*			0.0005
Male	183 (58.7%)	197 (45.7%)	
IUGR	24 (7.7%)	13 (3.0%)	0.003
Race			NS
AA*	169 (39.2%)	105 (33.7%)	
Asian	9 (2.1%)	2 (0.6%)	
CA	240 (55.7%)	193 (61.9%)	
Hawaiian	1 (0.2%)	0 (0%)	
Hispanic	10 (2.3%)	9 (2.9%)	
Multiple	2 (0.5%)	2 (0.6%)	
Native	0 (0%)	1 (0.3%)	
Stabilization – Intubation - Yes	268 (85.9%)	315 (73.1%)	0.0001
Antenatal Steroids* (any) - Yes	253 (81.1%)	383 (88.9%)	0.0039
Clinical center			<0.0001
Respiratory Support – days out of first 7			
HFNC (>2LPM) or higher	6.94 (0.484)	6.44 (1.36)	<0.0001
CPAP or higher	6.36 (1.62)	5.13 (2.36)	<0.0001
NIPPV or higher*	5.33 (2.33)	3.03 (2.66)	<0.0001
CV or higher	4.84 (2.53)	2.57 (2.54)	<0.0001
HFV	1.65 (2.33)	0.483 (1.41)	<0.0001
Cardio-Respiratory Medications – days out of first 7			
Caffeine	4.50 (2.71)	5.52 (2.09)	<0.0001
Hydrocortisone	0.151 (0.852)	0.0858 (0.636)	NS
Diuretic (any)	0.0609 (0.253)	0.0882 (0.428)	NS
CV Pressor	0.696 (1.43)	0.457 (1.26)	0.0163
Cardio/Respiratory Drug (any)	1.32 (0.768)	0.900 (0.770)	<0.0001
Surfactant	1.31 (0.763)	0.891 (0.756)	<0.0001
Vitamin A	0 (0)	0.00696 (0.0832)	NS
Nitric Oxide	0.0673 (0.537)	0.0232 (0.225)	NS
RSS on day 7 (Median, IQR)	0.25 (0, 10.2)	1.99 (0, 13.5)	<0.0001
Cumulative supplemental oxygen – amount above 21% per 24h over first 7 days*	59.0 (0, 350)	18.0 (0, 203)	<0.0001
Days on any milk feeding	3.13 (2.10)	4.00 (1.87)	<0.0001
Days on any human milk	3.02 (2.14)	3.63 (2.03)	<0.0001
Weight change over first 7 days	-16.3 (78.3)	-58.2 (77.1)	<0.0001
Respiratory Support – days out of first 14			
HFNC (>2LPM) or higher	13.7 (1.44)	12.0 (3.47)	<0.0001
CPAP or higher	12.1 (3.71)	8.69 (5.19)	<0.0001
NIPPV or higher*	10.0 (4.96)	5.16 (5.32)	<0.0001
CV or higher	8.88 (5.29)	4.19 (4.91)	<0.0001
HFV	3.42 (4.69)	0.884 (2.56)	<0.0001
Cardio-Respiratory Medications – days out of first 14			
Caffeine	9.67 (5.26)	11.8 (3.68)	<0.0001
Any steroid*	0.362 (1.61)	0.401 (1.66)	NS
Dexamethasone	0.0128 (0.179)	0.00232 (0.0482)	NS
Hydrocortisone	0.388 (1.66)	0.360 (1.60)	NS
Inhaled Bronchodilator	0.0865 (0.745)	0.281 (1.39)	0.0254
Diuretic (any)	0.615 (1.15)	0.564 (1.53)	NS
CV Pressor	1.18 (2.29)	0.838 (2.27)	0.0435
Other Cardio/Respiratory Drug (any)	1.55 (1.18)	1.09 (1.21)	<0.0001
Surfactant	1.41 (0.941)	0.914 (0.818)	<0.0001
Vitamin A	0.138 (0.729)	0.151 (0.770)	NS
Nitric Oxide	0.321 (1.28)	0.123 (0.799)	0.0101
RSS on day 14	2.47 (0, 17.6)	0.23 (0, 11.2)	<0.0001
Cumulative supplemental oxygen – amount above 21% per 24h over first 14 days*	144 (0, 741)	37.0 (0, 471)	<0.0001
Days on any milk feeding	8.42 (3.89)	9.82 (3.48)	<0.0001
Days on any human milk	8.03 (4.17)	9.08 (3.98)	0.0005
Weight change over first 14 days	81.4 (85.3)	55.9 (79.2)	<0.0001

Data are presented as N (%) or mean (SD) and as median (IQR) for continuous non-normally distributed variables

P values derived by chi-square for categorical variables and t-test or Wilcoxon rank sum test for continuous variables

*Remains significant after Multivariate Logistic Model with Center as Random Effects, after Elastic-Net Variable Selection

^oxygen requirement at 36w yes/no but also assigned if discharged before 36w based on O2 at discharge

LPM, liters per minute; HFNC, high-flow nasal cannula > 2 LPM; NIPPV, non-invasive positive pressure ventilation; CV, conventional ventilation; HFV, high-frequency ventilation, RSS, respiratory severity score (FIO2 x mean airway pressure), IQR, interquartile range