

**Supplemental Table 1 – Demographic and clinical findings of infants with Pierre Robin Sequence-related airway obstruction treated with mandibular distraction, based upon treatment outcome (success defined as tracheostomy avoidance).**

	Successful	Failure	p-value
Total number patients treated	62	6	
Gender (female)	48.4%	16.7%	0.209
Age at intervention (days)	47.2 ± 60.3	60.3 ± 58.2	0.610
Age at time of study (years)	5.4 ± 0.7	5.7 ± 1.6	0.840
Premature ( < 37 weeks)	21.0%	33.3%	0.607
Early intervention (< 5 days of life)	0.0%	0.0%	NA
Cleft palate	71.0%	83.3%	0.519
Birth weight (kg)	2.9 ± 0.7 <sup>4</sup>	2.4 ± 0.5 <sup>4</sup>	0.083
Birth weight Z score	-0.3 ± 1.1	-0.7 ± 1.2	0.469
Change in weight Z score from birth to 1yr	-0.3 ± 1.4	0.4 ± 1.4	0.389
Syndromic diagnosis	40.3%	83.3%	0.043*
Neurologic impairment	21.4% <sup>4</sup>	66.7%	0.034*
Gastroesophageal reflux	30.7%	50.0%	0.380
Surgical (G- or J-) feeding tube requirement	19.4%	50.0%	0.188
Multilevel airway obstruction	29.5% <sup>4</sup>	33.3%	1.000
Pre-intervention obstructive index (mean)	42.6 ± 29.9 <sup>4</sup>	50.7 ± 45.8 <sup>4</sup>	0.581
Post-intervention obstructive index (mean)	8.4 ± 9.9 <sup>2</sup>	24.8 ± 17.6 <sup>3</sup>	0.009*
Change in obstructive index (mean)	-34.1 ± 29.3 <sup>2</sup>	-32.3 ± 24.7 <sup>3</sup>	0.919

\*Statistically significant for the error rate 5%

All data were available for each patient with the exception of those marked, for whom only the following percentages of patients had that data point available: <sup>1</sup> <25%, <sup>2</sup> 25-49%, <sup>3</sup> 50-75%, <sup>4</sup> >75%.