

Table 1 - The primary pathology underlying need for LTMV		
<i>Underlying Pathology</i>	<i>Subgroup</i>	<i>Number of patients = n (%)</i>
Respiratory System (n=37, 80.4%)	Airway Malacia	18 (39.1)
	Fixed airway obstruction	7 (15.2)
	Associated with TOF +/- OA*	7 (15.2)
	Chronic Lung Disease	4 (8.7)
	Parenchymal Disease	1 (2.2)
Central Nervous System (n=3, 6.5%)	Central Nervous System (n=3, 6.5%)	3 (6.5)
Primary Complex Cardiac Pathology (n=3, 6.5%)	Associated airway/respiratory compromise	3 (6.5)
Other (n=3, 6.5%)	Hepatopulmonary Syndrome	1 (2.2)
	Traumatic Spinal Injury	1 (2.2)
	Transient Myasthenia Gravis	1 (2.2)

*Tracheo-oesophageal Fistula +/- Oesophageal Atresia

Table 2 - Breakdown of treatment course			
Treatment Course (days)	2009 - 2013	2014 - 2018	2009 - 2018
<i>Length of PICU Stay</i>	<i>n = 32</i>	<i>n = 14</i>	<i>n = 46</i>
Median (Interquartile Range)	111 (62 - 212)	109 (64 - 132)	109 (63 - 183)
Range	7 - 492	18 - 316	7 - 492
Sum total	4447	1628	6075
p-value (p-value <0.05)	-	0.221	-
<i>Total Hospital stay</i>	<i>n = 32</i>	<i>n = 14</i>	<i>n = 46</i>
Median (Interquartile Range)	501 (315 - 628)	445 (379 - 550)	467 (317 - 614)
Range	101 - 1369	189 - 645	101 - 1369
Sum total	16,905	6222	23,127
p-value	-	0.013*	-
<i>Duration of LTMV</i>	<i>n = 27</i>	<i>n = 9</i>	<i>n = 36</i>
Median (Interquartile Range)	539 (359 - 879)	333 (231 - 386)	431 (257 - 720)
Range	59 - 2642	158 - 525	59 - 2642
Sum total	19,392	2880	22,272
p-value	-	0.008*	-
<i>Cessation of LTMV to decannulation</i>	<i>n = 19</i>	<i>n = 5</i>	<i>n = 24</i>
Median (Interquartile Range)	443 (127 - 765)	227 (214 - 696)	424 (156 - 728)
Range	0 - 2292	195 - 718	0 - 2292
Sum total	10,642	2050	12,692
p-value	-	0.08	-

Table 3: Breakdown of outcomes			
Outcomes:	2009 - 2013	2014 - 2018	2009 - 2018
Number of patients	n = 32	n = 14	n = 46
Died on LTMV	6.2% (n = 2)	-	4.3 % (n=2)
Died after cessation of LTMV	6.2% (n = 2)	-	4.3 % (n=2)
LTMV Ongoing	9.5% (n = 3)	28.6% (n = 4)	15.2% (n=7)
LTMV stopped (tracheostomy in-situ)	12.5% (n = 4)	28.6% (n = 4)	17.3% (n=8)
LTMV stopped (decannulated)	59.4% (n = 19)	35.7% (n = 5)	52.1% (n=24)
Lost to follow up	6.2% (n = 2)	7.1% (n = 1)	6.5% (n=3)