

Supplemental Table 1: Multivariate analysis of mortality

	Estimate	95% CI	p-value
Prior thoracic disease	0.35	-0.11,0.81	0.14
Admitted on Home Ventilator	-1.60	-3.09,-0.12	0.03
Age	0.00	-0.01,0.01	0.92
Immunosuppressed	0.20	-0.57,0.97	0.61
PIM2 ^a	5.50	4.45,6.55	<0.0001
VAP ^b	1.00	0.20,1.80	0.01
Weight	0.01	-0.01,0.03	0.35

^aPIM-2 = pediatric index of mortality-2, ^bVAP = ventilator associated pneumonia

Supplemental Table 2: Multivariate analysis of total mechanical ventilation days

	Estimate	95% CI	p-value
Prior thoracic disease	3.17	2.11,4.23	<0.0001
Admitted on Home Ventilator	-0.22	-1.48,1.04	0.73
Age	0.00	-0.01,0.01	0.65
Immunosuppressed	1.36	-0.49,3.21	0.15
PIM2 ^a	-0.04	-0.36,0.29	0.83
VAP ^b	12.21	4.93,19.49	0.001
Weight	-0.01	-0.04,0.02	0.43

^aPIM-2 = pediatric index of mortality-2, ^bVAP = ventilator associated pneumonia

Supplemental Table 3: Multivariate analysis of PICU length of stay

	Estimate	95% CI	p-value
Prior thoracic disease	6.58	3.72,9.44	<0.0001
Admitted on Home Ventilator	-6.06	-7.89,-4.23	<0.0001
Age	-0.02	-0.04,0.00	0.013
Immunosuppressed	1.27	-3.06,5.60	0.56
PIM2 ^a	0.09	-0.46,0.65	0.74
VAP ^b	10.80	0.92,20.68	0.03
Weight	-0.02	-0.07,0.03	0.36

^aPIM-2 = pediatric index of mortality-2, ^bVAP = ventilator associated pneumonia