

**Supplemental Table 1. Univariate Odds Ratios for Mortality (N=214) in the Development Set (N=7560).**

	<b>Survival</b> <b>(n =7346)</b> <b>n (%)</b>	<b>Death</b> <b>(n = 214)</b> <b>n (%)</b>	<b>Odds ratios: Death vs.</b> <b>Survival (95% CI)</b>
<b>Sex</b>			
Male	4028 (97.3%)	112 (2.7%)	0.90 (0.69, 1.19)
Female	3318 (97%)	102 (3.0%)	Reference
<b>Age</b>			
0 day to < 7 days	212 (88.7%)	27 (11.3%)	4.92 (2.97, 8.15)
7 days to < 14 days	113 (90.4%)	12 (9.6%)	4.10 (2.10, 8.01)
14 days to < 21 days	44 (93.6%)	3 (6.4%)	2.64 (0.79, 8.83)
21 days to < 1 month	57 (96.6%)	2 (3.4%)	1.36 (0.32, 5.74)
1 month to < 12 months	1576 (97%)	49 (3%)	1.20 (0.79, 1.83)
12 months to < 60 months	2097 (97.9%)	45 (2.1%)	0.83 (0.54, 1.27)
60 months to < 144 months	1624 (97.9%)	34 (2.1%)	0.81 (0.51, 1.28)
>= 144 months	1623 (97.5%)	42 (2.5%)	Reference
<b>Admission Source</b>			
Inpatient unit	782 (94.4%)	46 (5.6%)	3.65 (2.40, 5.54)
Emergency department	2365 (97.9%)	51 (2.1%)	1.34 (0.89, 2.00)
Admission from another hospital	1410 (95.1%)	72 (4.9%)	3.17 (2.17, 4.62)
Post-intervention (operating room or post-anesthesia care) unit	2789 (98.4%)	45 (1.6%)	Reference
<b>PICU Admission Status</b>			
Elective (scheduled)	2734 (98.7%)	36 (1.3%)	0.34 (0.24, 0.49)

Emergency (unscheduled)	4612 (96.3%)	178 (3.7%)	Reference
<b>Intervention Classification</b>			
None	4557 (96.4%)	169 (3.6%)	3.10 (0.98, 9.79)
Cardiac	1018 (97.1%)	30 (2.9%)	2.47 (0.75, 8.14)
Interventional cardiac catheterization	97 (96%)	4 (4.0%)	3.45 (0.76, 15.70)
Neurosurgery	529 (99.2%)	4 (0.8%)	0.63 (0.14, 2.85)
Orthopedic	266 (100%)	0 (0%)	<0.01 (<0.01, >999)
General surgery	222 (98.2%)	4 (1.8%)	1.51 (0.33, 6.81)
ENT	406 (100%)	0 (0%)	<0.01 (<0.01, >999)
Other (1)	251 (98.8%)	3 (1.2%)	Reference
<b>Cardiac Arrest Within 24 Hours Prior to PICU Admission</b>			
Yes	64 (61.5%)	40 (38.5%)	26.2 (17.1, 39.9)
No	7282 (97.7%)	174 (2.3%)	Reference
<b>Cancer (Acute or Chronic)</b>			
Yes	528 (95.1%)	27 (4.9%)	1.87 (1.23, 2.81)
No	6818 (97.3%)	187 (2.7%)	Reference
<b>Trauma (Primary or Secondary Diagnosis)</b>			
Yes	464 (96.5%)	17 (3.5%)	1.28 (0.77, 2.12)
No	6882 (97.2%)	197 (2.8%)	Reference
<b>Primary System of Dysfunction</b>			
Respiratory	2484 (97.8%)	56 (2.2%)	1.69 (0.72, 3.94)
Cancer	276 (97.5%)	7 (2.5%)	1.90 (0.63, 5.71)

Cardiovascular disease - acquired	455 (91.5%)	42 (8.5%)	6.91 (2.91, 16.41)
Cardiovascular disease - congenital	1263 (95.8%)	55 (4.2%)	3.26 (1.39, 7.62)
Endocrine	249 (99.6%)	1 (0.4%)	0.30 (0.04, 2.51)
Gastrointestinal	253 (96.6%)	9 (3.4%)	2.66 (0.94, 7.57)
Hematological	59 (98.3%)	1 (1.7%)	1.27 (0.15, 10.72)
Musculoskeletal	318 (99.7%)	1 (0.3%)	0.24 (0.03, 1.96)
Neurological	1472 (97.6%)	36 (2.4%)	1.83 (0.77, 4.37)
Renal	68 (100%)	0 (0%)	<0.01 (<0.01, >999)
Other (1)	449 (98.7%)	6 (1.3%)	Reference
<b>PRISM <u>Physiological Variable</u> Score (2)<sup>1</sup></b>			
PRISM Cardiovascular			1.43 (1.36, 1.51)
PRISM Metabolic			1.33 (1.28, 1.39)
PRISM Chemistry Score			1.45 (1.37, 1.54)
PRISM Hematological Score			1.37 (1.31, 1.44)
PRISM Neurological Score			1.28 (1.24, 1.31)
PRISM Non-Neurological Score			1.23 (1.20, 1.25)
Total PRISM Score			1.21 (1.19, 1.23)
1. Other includes unknown			
2. Odds Ratios are for each 1 point increase of <u>the PRISM <u>physiological variable score</u></u> . <sup>1</sup> Cardiac components include heart rate, systolic blood pressure, and temperature. Neurological components include pupillary reactivity, and mental status. Respiratory components include arterial PO <sub>2</sub> , pH, PCO <sub>2</sub> , and total bicarbonate. Chemical components include glucose, potassium, blood urea nitrogen, and creatinine. Hematological components include white blood cell count, platelet count, prothrombin and partial thromboplastin time.			

1. Pollack MM, Patel KM, Ruttimann UE. PRISM III: an updated Pediatric Risk of Mortality score. *Critical Care Medicine*. May 1996;24(5):743-752.