

Supplemental Table 1: Patient Characteristics and Outcomes for Outliers in Patients with Plasma Samples

Characteristic	Full Cohort (n=91)	Without Outliers (n=75)	All Outliers (n=16)	Frequent Outliers Only* (n=4)	p- value [†]
Age, median (IQR)	48.0 (36.0-61.0)	48.0 (33.0-61.0)	52.0 (44.5-66.5)	55.0 (32.5-66.5)	0.24
Age \geq 65, n (%)	21 (23.1)	16 (21.3)	5 (31.3)	2 (50.0)	0.51
Sex (male), n (%)	58 (63.7)	46 (61.3)	12 (75.0)	4 (100.0)	0.40
Race (white), n (%)	57 (62.6)	46 (61.3)	11 (68.8)	2 (50.0)	0.77
Admission SOFA Score, median (IQR) (n=84)	5.0 (4.0-8.0)	5.0 (4.0-8.0)	6.0 (4.0-9.0)	9.5 (5.5-11.5)	0.30
Mechanism (flame), n (%)	85 (93.4)	70 (93.3)	15 (93.8)	4 (100.0)	0.99
Inhalation Injury (Yes), n (%)	76 (83.5)	62 (82.7)	14 (87.5)	4 (100.0)	0.99
Inhalation Injury Grade, median (IQR)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	3.0 (2.0-3.0)	0.85
TBSA, % median (IQR)	11.5 (1.0-28.0)	11.0 (1.0-27.0)	17.0 (1.5-30.0)	17.0 (7.5-25.0)	0.47
Baux Score	90.0 (74.4-117.7)	90.0 (74.4-117.7)	93.9 (72.2-111.5)	96.9 (91.8-101.5)	0.94
Revised Baux Score, median (IQR)	83.5 (65.0-104.0)	82.0 (60.0-102.0)	84.0 (77.5-112.5)	79.5 (71.5-94.0)	0.10
Lowest PaO ₂ :FiO ₂ ratio (initial 48 hours), median	183.5 (131.8-256.3)	185.8 (122.5-268.8)	167.2 (144.0-201.3)	166.5 (142.0-195.2)	0.43
% COHB, median (IQR)	6.6 (2.6-13.6)	6.8 (2.5-13.4)	5.7 (2.6-24.0)	16.5 (4.0-29.5)	0.94
24 hr fluid resuscitation (cc/kg), median (IQR)	77.9 (39.5-146.6)	76.0 (34.8-133.3)	105.4 (56.2-162.0)	83.8 (53.3-156.0)	0.21
72 hr fluid resuscitation (cc/kg), median (IQR)	187.5 (112.7-305.4)	186.2 (112.7-274.3)	217.8 (115.4-339.9)	193.4 (124.6-303.7)	0.85
Sepsis (N=103)	17 (18.9)	12 (16.2)	5 (31.3)	2 (50.0)	0.17
28-day Ventilator-Free Days	5.0 (0.0-23.0)	11.0 (0.0-24.0)	0.0 (0.0-4.5)	1.5 (0.0-14.0)	0.09
28-day ICU-Free Days	0.0 (0.0-15.0)	0.0 (0.0-17.0)	0.0 (0.0-2.0)	2.0 (0.0-10.0)	0.07
Acute Respiratory Distress Syndrome	62 (68.9)	51 (68.9)	11 (68.8)	3 (75.0)	0.99
In-Hospital Death	18 (20.0)	13 (17.6)	5 (31.3)	2 (50.0)	0.30

Outliers: values with more than 3 standard deviations from the mean. *Frequent means \geq 3 outliers for a patient. [†] Comparison by Wilcoxon-Mann-Whitney test for medians and Fisher's Exact test for proportions between 'Without Outliers' cohort and 'All Outliers' cohort

Supplemental Table 2. Patient Characteristics and Outcomes for Outliers in Patients with BAL Samples

Characteristic	Full Cohort (n=103)	Without Outliers (n=84)	All Outliers (n=19)	Frequent Outliers Only* (n=7)	p-value
Age, median (IQR)	48.5 (36.5-61.5)	49.0 (38.0-64.0)	44.0 (30.0-61.0)	53.0 (24.0-67.0)	0.40
Age≥65, n (%)	23 (22.3)	20 (23.8)	3 (15.8)	2 (28.6)	0.55
Sex (male), n (%)	67 (64.4)	53 (63.1)	14 (73.7)	3 (42.9)	0.44
Race (white), n (%)	63 (61.2)	55 (65.5)	8 (42.1)	5 (71.4)	0.06
Admission SOFA Score, median (IQR) (n=84)	5 (4-8)	5 (4-8)	7 (4-9)	7.0 (4.0-9.0)	0.17
Mechanism (flame), n (%)	97 (94.2)	81 (96.4)	16 (84.2)	5 (71.4)	0.04
Inhalation Injury (Yes), n (%)	86 (83.0)	70 (83.3)	16 (84.2)	6 (85.7)	0.93
Inhalation Injury Grade, median (IQR)	2 (1-3)	2 (1-3)	2 (1-4)	4 (2-4)	0.12
TBSA, % median (IQR)	12.8 (1.0-30.0)	14.3 (1.0-30.0)	9.0 (1.0-34.0)	7.0 (4.0-9.0)	0.86
Baux Score	93.9 (75.1-121.2)	93.0 (76.5-121.2)	98.8 (69.4-124.5)	69.4 (27.0-115.4)	0.98
Revised Baux Score*, median (IQR)	83.8 (66.0-104.5)	82.5 (63.5-106.0)	84.0 (74.0-103.0)	93.0 (84.0-105.0)	0.40
Lowest PaO ₂ :FiO ₂ ratio (initial 48 hours), median	182 (131.8-253.8)	183.0 (130.0-251.3)	160.0 (132.5-285.0)	164.4 (72.0-357.5)	0.84
% COHB, median (IQR)	5.7 (2.5-13.4)	5.0 (2.6-11.5)	9.8 (1.5-26.1)	19.9 (2.5-39.7)	0.31
24 hr fluid resuscitation (cc/kg), median (IQR)	79.5 (38.8-156.1)	90.2 (42.2-171.2)	56.1 (18.1-111.3)	33.7 (26.8-66.3)	0.03
72 hr fluid resuscitation (cc/kg), median (IQR)	194.7 (112.7-323.0)	202.5 (118.7-328.7)	112.2 (55.4-273.7)	100.5 (45.8-142.9)	0.03
Sepsis (N=103)	20 (19.6)	13 (15.7)	7 (36.8)	2 (28.6)	0.05
28-day Ventilator-Free Days	3.0 (0.0-23.0)	8.5 (0.0-24.0)	0.0 (0.0-6.0)	0.0 (0.0-6.0)	0.05
28-day ICU-Free Days	0.0 (0.0-15.0)	0.0 (0.0-16.0)	0.0 (0.0-5.0)	0.0 (0.0-5.0)	0.11
Acute Respiratory Distress Syndrome	69 (67.0)	54 (64.3)	15 (79.0)	7 (100.0)	0.21
In-Hospital Death	22 (21.6)	19 (22.3)	3 (15.8)	1 (14.3)	0.76

Outliers: values with more than 3 standard deviations from the mean. *Frequent means ≥ 3 outliers for a patient. † Comparison by Wilcoxon-Mann-Whitney test for medians and Fisher's Exact test for proportions between 'Without Outliers' cohort and 'All Outliers' cohort