

Appendix 1-Paraclinical parameters based on status and mechanical ventilation

Paraclinical parameters		Status			P-value	Mechanical ventilation		P-value
		Ward	Expired	ICU		No	Yes	
Age (Years)	Mean	52.44	70.29	62.55	0.000	56	62.35	0.005
	Std. Deviation	17.58	13.92	15.72		18.37	16.12	
BMI (Kg/m ²)	Mean	27.77	27.99	27.88	0.963	28.01	27.51	0.427
	Std. Deviation	4.41	4.39	5.47		4.63	4.85	
PH	Mean	7.40	7.36	7.40	0.069	7.40	7.38	0.041
	Std. Deviation	0.07	0.11	0.08		0.08	0.08	
Pco ₂ (mmHg)	Mean	36.23	39.09	36.36	0.169	36.46	37.27	0.490
	Std. Deviation	8.05	11.74	7.94		8.85	8.61	
Po ₂ (mmHg)	Mean	51.31	44.95	43.26	0.047	49.21	45.84	0.288
	Std. Deviation	26.53	22.04	16.7		25.54	19.62	
HCO ₃ (mEq/L)	Mean	22.8	21.95	22.73	0.549	22.83	22.28	0.355
	Std. Deviation	4.45	4.69	4.10		4.38	4.41	
Na (mEq/L)	Mean	136.71	137.78	136.81	0.207	136.61	137.51	0.050
	Std. Deviation	3.15	4.75	3.06		3.20	3.83	
K (mEq/L)	Mean	4.02	4.31	4.17	0.002	4.06	4.19	0.064
	Std. Deviation	0.48	0.52	0.48		0.52	0.44	
Ca (mg/dL)	Mean	8.39	8.40	8.37	0.976	8.38	8.40	0.892
	Std. Deviation	0.65	0.66	0.65		0.66	0.65	
P (mg/dL)	Mean	4.11	4.36	4.16	0.825	3.83	4.81	0.009
	Std. Deviation	1.74	1.52	1.46		1.11	2.12	
Alb (g/dL)	Mean	3.49	3.36	3.42	0.489	3.46	3.42	0.610
	Std. Deviation	0.55	0.50	0.51		0.56	0.47	
Mg (mg/dL)	Mean	2.10	2.26	2.17	0.094	2.09	2.24	0.007
	Std. Deviation	0.36	0.38	0.45		0.35	0.44	
WBC count (×10 ⁹ /L)	Mean	9.38	12.44	10.4	0.103	9.50	11.43	0.075
	Std. Deviation	9.16	7.78	5.21		8.83	6.18	
Lymph count (%)	Mean	13.42	11.95	10.69	0.223	13.88	9.78	0.004
	Std. Deviation	8.26	18.82	6.77		11.62	7.17	
PMN count (%)	Mean	80.69	85.94	84.03	0.004	81.28	84.70	0.010
	Std. Deviation	11.08	5.47	7		10.41	7.17	
Hb (g/dL)	Mean	12.39	12.6	12.36	0.839	12.46	12.32	0.626
	Std. Deviation	2.16	2.48	1.98		2.17	2.15	
Hct (%)	Mean	37.17	37.55	36.96	0.892	37.37	36.80	0.492
	Std. Deviation	6.02	8.02	5.42		5.93	6.73	
LDH (IU/L)	Mean	722.86	937	926.62	0.000	763.17	921.91	0.003
	Std. Deviation	343.27	386.42	412.46		366.51	398.42	
CRP (mg/L)	Mean	57.15	53.98	65.33	0.085	58.04	60.65	0.510
	Std. Deviation	29.55	25.35	30.5		28.77	30.58	
ESR (mm/h)	Mean	56.13	54.45	64.61	0.121	56.53	61.46	0.234
	Std. Deviation	30.15	33.08	27.26		31.06	27.93	
FBS (mg/dL)	Mean	166.48	179.71	177.45	0.465	165.91	182.86	0.092
	Std. Deviation	74.65	65.15	81.55		72.29	79.59	
BUN (mg/dL)	Mean	19.88	34.17	24.67	0.000	21.73	27.18	0.029
	Std. Deviation	16.39	21.35	18.93		19.09	17.32	
Cr (mg/dL)	Mean	1.26	1.47	1.33	0.598	1.23	1.49	0.142
	Std. Deviation	1.19	1.09	1.20		0.96	1.50	
AST (IU/L)	Mean	58.41	85.74	62.94	0.076	65.83	60.09	0.521
	Std. Deviation	49.92	128.98	34.29		70.11	56.93	
ALT (IU/L)	Mean	53.53	69.34	52.5	0.213	56.47	54.15	0.743
	Std. Deviation	45.78	86.45	36.54		47.36	60.86	
ALP (IU/L)	Mean	259.57	274.49	214.55	0.469	250.21	250.68	0.990
	Std. Deviation	244.02	331.41	133.82		228.43	261.41	
AG (mEq/L)	Mean	6.42	7.08	6.26	0.648	6.30	6.85	0.376
	Std. Deviation	4.40	5.40	4.57		4.60	4.64	
So ₂ (%)	Mean	92.99	85.93	87.26	0.001	92.23	86.40	0.000
	Std. Deviation	5.03	6.94	7.72		5.39	7.92	
RR (breaths/minute)	Mean	22.56	23.59	23.64	0.330	22.75	23.56	0.273
	Std. Deviation	5.17	6.51	5.79		5.33	6.03	
BPs (mmHg)	Mean	123.06	117.37	125.59	0.124	123.19	122.12	0.720
	Std. Deviation	17.74	28.18	20.21		18.53	24.07	

BPd (mmHg)	Mean	74.18	68.93	75.94	0.041	74.02	73.39	0.758
	Std. Deviation	12.57	18.17	14.71		13.29	16.25	

Abbreviation: BMI, Body Mass Index; Na, Sodium; K, Potassium; Ca, Calcium; P, Phosphorus; Alb, Albumin; Mg, Magnesium; WBC count, White Blood Cell count; Lymph count, Lymphocyte count; PMN count, Polymorpho Nuclear count; Hb, Hemoglobin; Hct, Hematocrit; LDH, Lactate-dehydrogenase; CRP, C-reactive protein; ESR, Erythrocyte Sedimentation Rate; FBS, Fasting Blood Sugar; BUN, Blood Urea Nitrogen; Cr, Creatinine; AST, Aspartate transaminase; ALT, alanine transaminase; ALP, Alkaline Phosphatase; So₂, Saturation of O₂; AG, Anion Gap; RR, Respiratory Rate;

One-way ANOVA, P < 0.05 was considered statistically significant.

Appendix 2-Paraclinical parameters based on PH categories

Paraclinical parameters		Metabolic Acidosis	Metabolic Alkalosis	Respiratory Acidosis	Respiratory Alkalosis	P-value
Age (Years)	Mean	60.11	57.85	56.53	57.80	0.859
	Std. Deviation	18.53	18.18	21.51	17.08	
BMI (Kg/m ²)	Mean	28.30	28.01	28.84	27.44	0.538
	Std. Deviation	4.73	4.53	6.35	4.54	
PH	Mean	7.41	7.39	7.38	7.39	0.225
	Std. Deviation	0.06	0.08	0.07	0.08	
Pco ₂ (mmHg)	Mean	37.25	36.84	36.22	36.57	0.965
	Std. Deviation	8.94	9.18	8.88	8.56	
Po ₂ (mmHg)	Mean	50.70	47.15	53.76	46.7	0.561
	Std. Deviation	30.01	24.39	21.66	20.85	
HCO ₃ (mEq/L)	Mean	23.74	22.51	22.76	22.27	0.276
	Std. Deviation	4.28	4.37	4.49	4.41	
Na (mEq/L)	Mean	136.49	136.88	137.59	136.99	0.700
	Std. Deviation	3.24	3.74	3.82	3.34	
K (mEq/L)	Mean	3.99	4.18	3.94	4.13	0.105
	Std. Deviation	0.4	0.56	0.51	0.49	
Ca (mg/dL)	Mean	8.34	8.37	8.29	8.43	0.777
	Std. Deviation	0.56	0.79	0.46	0.63	
P (mg/dL)	Mean	4.19	4.03	4.29	4.22	0.960
	Std. Deviation	1.58	1.34	1.95	1.72	
Alb (g/dL)	Mean	3.46	3.40	3.36	3.48	0.783
	Std. Deviation	0.57	0.51	0.73	0.5	
Mg (mg/dL)	Mean	2.13	2.2	2.1	2.13	0.640
	Std. Deviation	0.39	0.39	0.37	0.4	
WBC count (×10 ⁹ /L)	Mean	9.95	9.28	13.12	10.24	0.389
	Std. Deviation	13.91	5.99	10.05	5.2	
Lymph count (%)	Mean	12.27	13.17	13.19	12.00	0.909
	Std. Deviation	7.1	16.22	11.89	7.68	
PMN count (%)	Mean	81.48	83.15	81.38	82.73	0.793
	Std. Deviation	14.45	6.47	11.72	7.91	
Hb (g/dL)	Mean	12.58	12.44	12.61	12.31	0.878
	Std. Deviation	2.38	2.06	1.87	2.17	
Hct (%)	Mean	37.28	37.53	37.68	36.91	0.909
	Std. Deviation	6.56	5.50	5.49	6.52	
LDH (IU/L)	Mean	815.92	818.33	762.13	827.74	0.939
	Std. Deviation	377.21	448.56	289.58	369.23	
CRP (mg/L)	Mean	58.98	58.14	60.24	59.13	0.994
	Std. Deviation	27.83	30.67	29.03	29.68	
ESR (mm/h)	Mean	53.76	55.66	53.5	61.67	0.350
	Std. Deviation	30.05	28.64	25.21	31.18	
FBS (mg/dL)	Mean	169.74	175.38	137.88	175.26	0.273
	Std. Deviation	78.22	86.25	54.74	70.11	
BUN (mg/dL)	Mean	24.28	23.18	20.06	23.98	0.862
	Std. Deviation	23.85	16.92	17.46	17.51	
Cr (mg/dL)	Mean	1.21	1.30	1.28	1.37	0.879
	Std. Deviation	1.07	0.97	1.11	1.32	
AST (IU/L)	Mean	62.68	71.07	53.06	62.35	0.752
	Std. Deviation	70.62	93.07	14.39	51.25	

ALT (IU/L)	Mean	54.04	57.42	44.88	55.90	0.835
	Std. Deviation	66.11	54.36	15.58	48.35	
ALP (IU/L)	Mean	209.37	246.25	323.23	257.86	0.506
	Std. Deviation	123.33	133.87	359.89	287.09	
AG (mEq/L)	Mean	6.01	6.88	7.41	6.35	0.636
	Std. Deviation	4.75	4.51	4.21	4.68	
So ₂ (%)	Mean	90.28	90.87	90.71	89.88	0.825
	Std. Deviation	8.60	5.99	6.32	6.77	
RR (breaths/minute)	Mean	23.32	23.75	22.47	22.64	0.596
	Std. Deviation	6.64	5.93	4.77	5.08	
BPs (mmHg)	Mean	118.49	121.67	120.76	125.27	0.237
	Std. Deviation	23.73	21.3	17.51	19.12	
BPd (mmHg)	Mean	71.19	72.25	72.29	75.72	0.195
	Std. Deviation	17.23	14.59	15.18	12.74	

Abbreviation: BMI, Body Mass Index; Na, Sodium; K, Potassium; Ca, Calcium; P, Phosphorus; Alb, Albumin; Mg, Magnesium; WBC count, White Blood Cell count; Lymph count, Lymphocyte count; PMN count, Polymorpho Nuclear count; Hb, Hemoglobin; Hct, Hematocrit; LDH, Lactate-dehydrogenase; CRP, C-reactive protein; ESR, Erythrocyte Sedimentation Rate; FBS, Fasting Blood Sugar; BUN, Blood Urea Nitrogen; Cr, Creatinine; AST, Aspartate transaminase; ALT, alanine transaminase; ALP, Alkaline Phosphatase; So₂, Saturation of O₂; AG, Anion Gap; RR, Respiratory Rate;

One-way ANOVA, P < 0.05 was considered statistically significant.

Appendix 3-Paraclinical parameters based on potassium categories

Paraclinical parameters		Mild Hypokalemia	Moderate Hypokalemia	Severe Hypokalemia	Hyperkalemia	P-value
Age (Years)	Mean	56.72	54.27	77.00	64.74	0.023
	Std. Deviation	17.33	21.84	-	17.37	
BMI (Kg/m ²)	Mean	27.67	28.62	25.39	28.32	0.703
	Std. Deviation	4.69	2.92	-	5.24	
PH	Mean	7.41	7.36	7.32	7.34	0.000
	Std. Deviation	0.06	0.09	-	0.11	
Pco ₂ (mmHg)	Mean	36.38	38.53	21.00	37.92	0.170
	Std. Deviation	7.80	7.81	-	11.90	
Po ₂ (mmHg)	Mean	48.29	50.13	60.00	46.19	0.880
	Std. Deviation	23.52	28.51	-	23.36	
HCO ₃ (mEq/L)	Mean	23.23	22.99	11.00	20.45	0.000
	Std. Deviation	4.04	5.08	-	4.58	
Na (mEq/L)	Mean	136.76	137.80	134.00	137.30	0.448
	Std. Deviation	3.25	3.25	-	4.18	
K (mEq/L)	Mean	3.97	3.34	2.70	4.91	0.000
	Std. Deviation	0.27	0.07	-	0.29	
Ca (mg/dL)	Mean	8.42	8.22	7.80	8.33	0.511
	Std. Deviation	0.63	0.88	-	0.65	
P (mg/dL)	Mean	3.95	3.10	5.00	5.04	0.008
	Std. Deviation	1.57	0.91	-	1.52	
Alb (g/dL)	Mean	3.52	3.08	1.90	3.31	0.000
	Std. Deviation	0.51	0.70	-	0.48	
Mg (mg/dL)	Mean	2.13	1.99	1.70	2.28	0.042
	Std. Deviation	0.38	0.33	-	0.42	
WBC count (×10 ⁹ /L)	Mean	9.63	8.40	44.70	12.08	0.000
	Std. Deviation	8.31	4.69	-	5.92	
Lymph count (%)	Mean	13.04	12.33	3.00	10.33	0.364
	Std. Deviation	11.11	8.42	-	8.02	
PMN count (%)	Mean	81.79	83.27	91.00	84.56	0.275
	Std. Deviation	9.96	8.90	-	7.82	
Hg (g/dL)	Mean	12.51	11.28	9.70	12.45	0.108
	Std. Deviation	1.94	1.60	-	2.95	
Hct (%)	Mean	37.33	33.76	28.40	37.83	0.066
	Std. Deviation	5.70	3.88	-	8.15	
LDH (IU/L)	Mean	814.57	691.29	-	876.09	0.286
	Std. Deviation	388.43	410.54	-	358.15	
CRP (mg/L)	Mean	60.47	59.07	50.00	52.66	0.459
	Std. Deviation	28.51	29.76	-	32.81	
ESR (mm/h)	Mean	57.19	67.08	57.00	59.88	0.692

	Std. Deviation	28.37	32.54	-	36.02	
FBS (mg/dL)	Mean	168.35	129.80	170.00	198.36	0.011
	Std. Deviation	68.67	34.21	-	98.81	
BUN (mg/dL)	Mean	20.58	20.40	71.00	35.36	0.000
	Std. Deviation	15.63	19.58	-	23.33	
Cr (mg/dL)	Mean	1.16	1.02	3.20	1.99	0.000
	Std. Deviation	1.01	0.42	-	1.63	
AST (IU/L)	Mean	59.42	49.29	43.00	87.38	0.061
	Std. Deviation	44.35	22.62	-	122.48	
ALT (IU/L)	Mean	51.61	41.43	32.00	77.47	0.016
	Std. Deviation	41.13	19.20	-	85.25	
ALP (IU/L)	Mean	223.75	284.45	1364.00	309.66	0.000
	Std. Deviation	195.57	203.50	-	309.49	
AG (mEq/L)	Mean	5.92	6.60	15.00	8.51	0.001
	Std. Deviation	4.45	5.33	-	4.37	
So ₂ (%)	Mean	90.26	90.87	99.00	89.83	0.598
	Std. Deviation	7.12	5.93	-	6.45	
RR (breaths/minute)	Mean	22.97	24.53	18.00	22.87	0.584
	Std. Deviation	5.35	5.27	-	6.55	
BPs (mmHg)	Mean	123.12	117.33	101.00	123.85	0.504
	Std. Deviation	19.69	19.11	-	24.13	
BPd (mmHg)	Mean	74.53	68.2	66.00	72.87	0.354
	Std. Deviation	13.55	12.23	-	17.62	
Cl (mEq/L)	Mean	108.98	110.07	108	110.38	0.443
	Std. Deviation	5.28	4.16	-	7.02	

Abbreviation: BMI, Body Mass Index; Na, Sodium; K, Potassium; Ca, Calcium; P, Phosphorus; Alb, Albumin; Mg, Magnesium; WBC count, White Blood Cell count; Lymph count, Lymphocyte count; PMN count, Polly Morpho Nuclear count; Hb, Hemoglobin; Hct, Hematocrit; LDH, Lactate-dehydrogenase; CRP, C-reactive protein; ESR, Erythrocyte Sedimentation Rate; FBS, Fasting Blood Sugar; BUN, Blood Urea Nitrogen; Cr, Creatinine; AST, Aspartate transaminase; ALT, alanine transaminase; ALP, Alkaline Phosphatase; So₂, Saturation of O₂; Cl, Chloride; AG, Anion Gap; RR, Respiratory Rate;

One-way ANOVA, $P < 0.05$ was considered statistically significant.

Appendix 4-Paraclinical parameters based on sodium categories

Paraclinical parameters		Mild Hyponatremia	Moderate Hyponatremia	Normal	P-value
Age (Years)	Mean	60.87	66.60	56.40	0.097
	Std. Deviation	16.89	8.14	18.40	
BMI (Kg/m ²)	Mean	27.77	27.21	27.89	0.937
	Std. Deviation	4.43	3.01	4.91	
PH	Mean	7.40	7.26	7.39	0.001
	Std. Deviation	0.06	0.22	0.08	
Pco ₂ (mmHg)	Mean	35.79	38.00	37.22	0.453
	Std. Deviation	7.15	19.59	9.11	
Po ₂ (mmHg)	Mean	45.34	44.00	49.67	0.368
	Std. Deviation	21.69	22.12	24.75	
HCO ₃ (mEq/L)	Mean	22.70	14.90	22.85	0.000
	Std. Deviation	4.12	2.67	4.37	
Na (mEq/L)	Mean	133.85	128.00	138.88	0.000
	Std. Deviation	1.39	2.23	2.45	
K (mEq/L)	Mean	4.11	4.50	4.09	0.202
	Std. Deviation	0.49	0.81	0.49	
Ca (mg/dL)	Mean	8.48	8.48	8.34	0.348
	Std. Deviation	0.70	0.98	0.61	
P (mg/dL)	Mean	4.16	4.20	4.18	0.996
	Std. Deviation	1.58	0.14	1.65	
Alb (g/dL)	Mean	3.42	3.47	3.47	0.851
	Std. Deviation	0.56	0.25	0.53	
Mg (mg/dL)	Mean	2.12	2.38	2.15	0.437
	Std. Deviation	0.38	0.34	0.40	
WBC count (×10 ⁹ /L)	Mean	10.68	16.26	9.67	0.150
	Std. Deviation	11.39	8.86	5.34	
Lymph count (%)	Mean	12.32	6.25	12.62	0.484
	Std. Deviation	8.17	4.03	11.53	

PMN count (%)	Mean	81.43	85.75	82.94	0.422
	Std. Deviation	12.60	2.50	7.59	
Hb (g/dL)	Mean	12.46	12.56	12.38	0.947
	Std. Deviation	2.38	1.06	2.06	
Hct (%)	Mean	36.96	36.74	37.31	0.905
	Std. Deviation	7.07	3.26	5.78	
LDH (IU/L)	Mean	848.10	902.00	799.02	0.602
	Std. Deviation	422.67	467.82	359.89	
CRP (mg/L)	Mean	60.08	70.00	57.94	0.603
	Std. Deviation	26.63	30.62	30.84	
ESR (mm/h)	Mean	59.44	63.80	57.41	0.815
	Std. Deviation	31.68	26.75	29.38	
FBS (mg/dL)	Mean	169.79	208.60	171.58	0.534
	Std. Deviation	71.56	111.61	76.06	
BUN (mg/dL)	Mean	23.77	35.75	23.16	0.410
	Std. Deviation	18.35	28.14	18.60	
Cr (mg/dL)	Mean	1.35	2.28	1.27	0.161
	Std. Deviation	1.16	2.62	1.12	
AST (IU/L)	Mean	60.13	66.40	65.90	0.809
	Std. Deviation	35.06	23.38	78.68	
ALT (IU/L)	Mean	54.55	97.60	54.97	0.193
	Std. Deviation	41.83	109.01	54.67	
ALP (IU/L)	Mean	277.73	203.75	235.75	0.489
	Std. Deviation	345.37	122.97	146.11	
AG (mEq/L)	Mean	4.94	6.30	7.34	0.000
	Std. Deviation	4.14	5.22	4.64	
So ₂ (%)	Mean	89.41	89.20	90.74	0.338
	Std. Deviation	7.89	8.95	6.26	
RR (breaths/minute)	Mean	23.71	23.4	22.63	0.348
	Std. Deviation	6.20	4.21	5.24	
BPs (mmHg)	Mean	122.51	128	122.84	0.845
	Std. Deviation	22.13	23.31	19.65	
BPd (mmHg)	Mean	74.22	79.80	73.39	0.584
	Std. Deviation	14.65	10.37	14.29	
Cl (mEq/L)	Mean	107.89	106.8	110.17	0.005
	Std. Deviation	5.47	4.97	5.52	

Abbreviation: BMI, Body Mass Index; Na, Sodium; K, Potassium; Ca, Calcium; P, Phosphorus; Alb, Albumin; Mg, Magnesium; WBC count, White Blood Cell count; Lymph count, Lymphocyte count; PMN count, Polly Morpho Nuclear count; Hb, Hemoglobin; Hct, Hematocrit; LDH, Lactate-dehydrogenase; CRP, C-reactive protein; ESR, Erythrocyte Sedimentation Rate; FBS, Fasting Blood Sugar; BUN, Blood Urea Nitrogen; Cr, Creatinine; AST, Aspartate transaminase; ALT, alanine transaminase; ALP, Alkaline Phosphatase; So₂, Saturation of O₂; Cl, Chloride; AG, Anion Gap; RR, Respiratory Rate;

One-way ANOVA, $P < 0.05$ was considered statistically significant.