

Supplementary materials

Predictive Value of NLMR, PLR, and Ferritin in Relation to SOFA, APACHE II, and SAPS II in Sepsis Patients

Table S1. Pathology and infectious site for the entire amount of patients.

Underlying conditions	Number of patients	%	Infectious site	Number of patients	%
Cardiovascular disease	83	82.17	Pulmonary	62	61.38
Renal disease	70	69.3	Abdominal	38	37.62
Respiratory disease	63	62.37	Urinary tract	12	11.88
Neurological disease	51	50.49	Cutaneous	10	9.9
Diabetes	35	34.65	Soft tissue	5	4.95
Trauma	15	14.85	Thoracic cavity	1	0.99
Other	98	97.02	Unidentified	1	0.99

Table S2. Descriptive statistics for sepsis patients (N = 62).

	SOFA (points) D1	SOFA (points) D5	APACHE II (points) D1	APACHE II (points) D5	SAPS II (points) D1	SAPS II (points) D5	PLR D1	PLR D5
Number of values	62	38	62	38	62	38	62	42
Minimum	1.000	0.000	8.000	5.000	17.00	16.00	3.030	0.000
25% Percentile	5.750	3.000	16.50	14.75	43.00	31.75	138.0	102.6
Median	9.000	8.000	22.00	20.00	60.50	49.00	249.9	204.2
75% Percentile	12.00	12.25	29.00	27.00	72.00	62.25	407.0	325.4
Maximum	18.00	19.00	44.00	37.00	89.00	85.00	1488	865.5
Range	17.00	19.00	36.00	32.00	72.00	69.00	1484	865.5
Mean	8.887	8.000	22.63	20.45	56.71	49.37	320.9	252.5
Std. Deviation	4.243	4.948	8.466	8.353	18.78	19.47	278.0	202.7
Std. Error of Mean	0.5389	0.8027	1.075	1.355	2.385	3.158	35.31	31.28
Coefficient of variation	47.74%	61.85%	37.41%	40.85%	33.12%	39.43%	86.63%	80.30%
Skewness	0.06632	0.2670	0.2865	0.1409	-0.3221	0.1444	2.001	1.202
Kurtosis	-0.6174	-0.8390	-0.4282	-0.5955	-0.7532	-0.8786	5.103	1.042

	NLMR D1	NLMR D5	COHb (%) D1	COHb (%) D5	Ferritin (pg/L) D1	Ferritin (pg/L) D5
Number of values	62	42	62	43	62	41
Minimum	0.6604	0.7947	0.000	0.000	9.530	20.60
25% Percentile	7.895	6.693	0.6500	0.5000	262.0	228.0
Median	18.04	13.16	1.300	0.9000	393.0	386.0
75% Percentile	39.84	36.25	1.600	1.400	743.8	987.0
Maximum	3727	256.6	2.800	2.300	6220	4580
Range	3726	255.8	2.800	2.300	6210	4559
Mean	90.39	32.70	1.200	0.9884	811.6	708.5
Std. Deviation	470.5	53.17	0.6806	0.5905	1085	844.3
Std. Error of Mean	59.76	8.205	0.08644	0.09005	137.8	131.9
Coefficient of variation	520.6%	162.6%	56.72%	59.74%	133.7%	119.2%
Skewness	7.813	2.904	0.1724	0.4834	2.835	2.911
Kurtosis	61.35	8.604	-0.4877	-0.4953	9.876	10.78

Legend: APACHE II – Acute Physiology And Chronic Health Evaluation II, COHb – Carboxyhaemoglobin, D1: day 1, D5: day 5, NLMR – Neutrophil-to-Lymphocyte-to-Monocyte Ratio, PLR – Platelet-to-Lymphocyte Ratio, SAPS II – Simplified Acute Physiology Score II, SOFA – Sequential Organ Failure Assessment.

Table S3. Descriptive statistics for septic shock patients (N = 39).

	SOFA (points) D1	SOFA (points) D5	APACHE II (points) D1	APACHE II (points) D5	SAPS II (points) D1	SAPS II (points) D5	PLR D1	PLR D5
Number of values	39	20	39	20	39	20	39	21
Minimum	2.000	0.000	7.000	5.000	17.00	12.00	49.53	69.00
25% Percentile	8.000	2.000	16.00	9.000	40.00	27.50	154.7	111.1
Median	11.00	8.500	27.00	19.50	61.00	44.50	297.7	224.1
75% Percentile	14.00	12.75	31.00	32.00	79.00	70.50	463.8	386.4
Maximum	19.00	16.00	41.00	37.00	118.0	95.00	1028	682.2
Range	17.00	16.00	34.00	32.00	101.0	83.00	978.0	613.2
Mean	10.95	7.600	24.18	20.50	57.74	48.15	326.2	261.8

Std. Deviation	4.142	5.519	9.534	11.04	22.85	24.31	216.1	180.3
Std. Error of Mean	0.6632	1.234	1.527	2.469	3.659	5.436	34.60	39.34
Coefficient of variation	37.83%	72.62%	39.43%	53.87%	39.57%	50.49%	66.24%	68.87%
Skewness	-0.2755	-0.007012	-0.3403	0.04143	0.2001	0.2507	1.070	1.050
Kurtosis	-0.5737	-1.522	-0.9154	-1.643	-0.2594	-1.091	1.523	0.2748
	NLMR D1	NLMR D5	COHb (%) D1	COHb (%) D5	Ferritin (pg/L) D1	Ferritin (pg/L) D5		
Number of values	39	22	39	21	39	21		
Minimum	3.802	1.563	0.000	0.000	54.90	110.0		
25% Percentile	10.99	9.192	0.4000	0.6500	370.0	261.0		
Median	33.84	14.01	1.100	1.000	1180	521.0		
75% Percentile	58.24	31.86	1.600	1.750	1620	1120		
Maximum	234.5	122.3	3.300	2.600	7300	3050		
Range	230.7	120.7	3.300	2.600	7245	2940		
Mean	44.96	28.70	1.118	1.152	1429	807.2		
Std. Deviation	49.39	33.39	0.7546	0.7298	1508	728.6		
Std. Error of Mean	7.908	7.118	0.1208	0.1593	241.5	159.0		
Coefficient of variation	109.8%	116.3%	67.50%	63.33%	105.6%	90.25%		
Skewness	2.200	1.835	0.4594	0.3441	2.260	1.744		
Kurtosis	5.313	2.559	0.2653	-0.6135	6.131	3.519		

Legend: APACHE II – Acute Physiology And Chronic Health Evaluation II, COHb – Carboxyhaemoglobin, D1: day 1, D5: day 5, NLMR – Neutrophil-to-Lymphocyte-to-Monocyte Ratio, PLR – Platelet-to-Lymphocyte Ratio, SAPS II – Simplified Acute Physiology Score II, SOFA – Sequential Organ Failure Assessment.

Table S4. Descriptive statistics for survivor patients (N = 26).

	SOFA (points) D1	SOFA (points) D5	APACHE II (points) D1	APACHE II (points) D5	SAPS II (points) D1	SAPS II (points) D5	PLR D1	PLR D5
Number of values	26	16	26	16	26	16	26	19

Minimum	1.000	0.000	7.000	5.000	17.00	12.00	48.53	0.000
25% Percentile	3.000	2.000	10.75	8.000	27.75	23.25	178.9	101.8
Median	6.000	2.000	14.00	10.50	36.00	28.00	257.0	224.8
75% Percentile	9.000	7.750	22.25	18.75	56.25	39.25	465.6	410.3
Maximum	16.00	12.00	31.00	21.00	79.00	60.00	691.7	682.2
Range	15.00	12.00	24.00	16.00	62.00	48.00	643.1	682.2
Mean	6.577	4.125	16.50	12.25	41.23	31.00	309.5	274.0
Std. Deviation	3.900	3.793	7.393	5.335	16.87	13.16	177.6	197.4
Std. Error of Mean	0.7649	0.9481	1.450	1.334	3.309	3.290	34.83	45.29
Coefficient of variation	59.31%	91.94%	44.81%	43.55%	40.92%	42.45%	57.38%	72.05%
Skewness	0.7884	0.9205	0.7347	0.4161	0.4721	0.9542	0.5959	0.7374
Kurtosis	0.08251	-0.4848	-0.5793	-1.398	-0.6866	0.7312	-0.6508	-0.2520

	NLMR D1	NLMR D5	COHb (%) D1	COHb (%) D5	Ferritin (pg/L) D1	Ferritin (pg/L) D5
Number of values	26	19	26	20	26	20
Minimum	2.718	1.563	0.1000	0.000	44.30	111.0
25% Percentile	7.230	3.183	0.4750	0.7250	275.0	205.8
Median	11.22	9.722	1.350	1.000	393.5	341.5
75% Percentile	30.77	22.60	1.900	1.675	989.3	754.5
Maximum	142.7	256.6	2.800	2.200	2700	2720
Range	139.9	255.1	2.700	2.200	2656	2609
Mean	23.34	28.65	1.273	1.130	639.9	584.0
Std. Deviation	29.29	57.67	0.7998	0.6165	589.4	604.4
Std. Error of Mean	5.744	13.23	0.1568	0.1379	115.6	135.1
Coefficient of variation	125.5%	201.3%	62.82%	54.56%	92.10%	103.5%
Skewness	3.065	3.800	0.2100	-0.1069	1.965	2.588
Kurtosis	11.16	15.41	-0.9352	-0.8148	4.806	8.030

Legend: APACHE II – Acute Physiology And Chronic Health Evaluation II, COHb – Carboxyhaemoglobin, D1: day 1, D5: day 5, NLMR – Neutrophil-to-Lymphocyte-to-Monocyte Ratio,

PLR – Platelet-to-Lymphocyte Ratio, SAPS II – Simplified Acute Physiology Score II, SOFA – Sequential Organ Failure Assessment.

Table S5. Descriptive statistics for non-survivor patients (N = 75).

	SOFA (points) D1	SOFA (points) D5	APACHE II (points) D1	APACHE II (points) D5	SAPS II (points) D1	SAPS II (points) D5	PLR D1	PLR D5
Number of values	75	42	75	42	75	42	75	44
Minimum	2.000	0.000	8.000	5.000	17.00	16.00	3.030	15.68
25% Percentile	8.000	5.000	19.00	16.00	48.00	43.50	104.8	108.9
Median	11.00	10.00	27.00	22.50	65.00	54.00	283.2	185.7
75% Percentile	13.00	13.00	31.00	32.00	74.00	72.50	409.7	316.6
Maximum	19.00	19.00	44.00	37.00	118.0	95.00	1488	865.5
Range	17.00	19.00	36.00	32.00	101.0	79.00	1484	849.8
Mean	10.76	9.286	25.56	23.60	62.61	55.79	327.6	247.6
Std. Deviation	3.914	4.845	8.164	8.526	18.54	19.48	277.4	194.4
Std. Error of Mean	0.4520	0.7477	0.9427	1.316	2.141	3.005	32.03	29.31
Coefficient of variation	36.38%	52.18%	31.94%	36.13%	29.61%	34.91%	84.67%	78.53%
Skewness	-0.2359	-0.1360	-0.1315	-0.2798	-0.1517	-0.1348	1.815	1.350
Kurtosis	-0.2156	-0.8723	-0.3447	-0.7399	0.2100	-0.6514	4.164	1.500
	NLMR D1	NLMR D5	COHb (%) D1	COHb (%) D5	Ferritin (pg/L) D1	Ferritin (pg/L) D5		
Number of values	75	45	75	44	75	42		
Minimum	0.6604	0.7947	0.000	0.000	9.530	20.60		
25% Percentile	12.03	8.211	0.5000	0.5000	274.0	293.0		
Median	23.74	14.88	1.100	0.9000	666.0	458.5		
75% Percentile	60.68	36.50	1.600	1.375	1570	1160		
Maximum	3727	171.8	3.300	2.600	7300	4580		
Range	3726	171.0	3.300	2.600	7290	4559		
Mean	90.01	32.46	1.132	1.002	1192	817.1		
Std. Deviation	427.8	42.50	0.6747	0.6511	1437	877.8		

Std. Error of Mean	49.39	6.336	0.07790	0.09816	166.0	135.4
Coefficient of variation	475.2%	131.0%	59.60%	64.96%	120.6%	107.4%
Skewness	8.527	2.204	0.2657	0.7310	2.242	2.444
Kurtosis	73.42	4.253	0.1848	-0.09590	5.771	7.833

Legend: APACHE II – Acute Physiology And Chronic Health Evaluation II, COHb – Carboxyhaemoglobin, D1: day 1, D5: day 5, NLMR – Neutrophil-to-Lymphocyte-to-Monocyte Ratio, PLR – Platelet-to-Lymphocyte Ratio, SAPS II – Simplified Acute Physiology Score II, SOFA – Sequential Organ Failure Assessment.