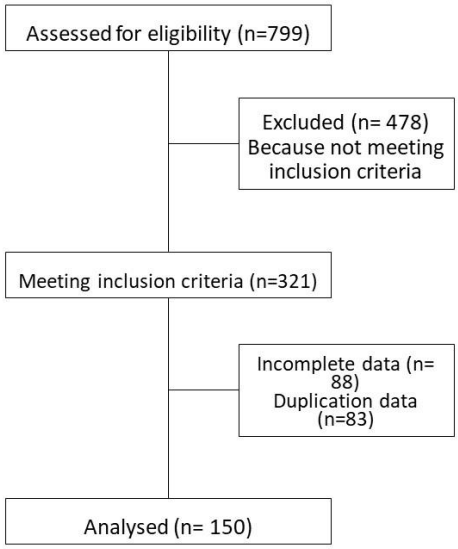
Basic Results Summary

ISRCTN 13543394

The impact of initial scores, white blood cell and platelet counts, and albumin on length of stay and mortality in sepsis patients

Patricipant Flow



Baseline Characteristics

Table 1. Participants Characteristics

		Mortality in ICU		p
		Yes N= 113 (75.3%)	No N= 37 (24.7%)	
Sex				
Male	N= 68	50 (73.5%)	18 (26.5%)	0.641ǂ
Female	N= 82	63 (76.8%)	19 (23.2%)	
Age – median (range) (years)*	61 (23-80)	62 (24-80)	56 (23-80)	**0.008** ϕ
Weight – median (range) (kg)*	60 (40-93)	62 (40-93)	60 (45-90)	0.163 ϕ
Comorbidities				
Hypertension	N= 25	19	6	0.716**
Diabetes mellitus	N= 20	13	7	
Heart failure	N= 5	3	2	
CVA/ stroke	N= 5	4	1	
Asthma or COPD	N= 5	3	2	
Chronic kidney disease	N= 2	2	0	
Others (tumor, schizophrenia, liver disease)	N= 4	3	1	
Hypertension and Diabetes mellitus	N= 9	6	3	
Hypertension and chronic kidney disease	N= 3	1	0	

Hypertension and CVA/ stroke	N= 2	2	0	
Hypertension and heart failure	N= 2	2	0	
Diabetes mellitus and coronary artery disease	N= 2	2	0	
Others combination	N= 8	5	3	
Number of comorbidities				
No comorbidities	58 (38.7)	46	12	0.568ǂ
1 comorbid	66 (44.0)	47	19	
2 or more	26 (17.3)	20	6	

*not normally distributed data

ǂ Uji Chi square, bermakna secara statistik jika p < 0,05

ϕ Uji Mann-Whitney U Test, bermakna secara statistik jika p < 0,05

** Uji Fisher's Exact Test, bermakna secara statistik jika p < 0,05

Outcome Measures

Table 2. Differences between qSOFA, NEWS-2, and ROX index in mortality group and survival group.

		Mortality in ICU		P ϕ
	N	Yes	No	
qSOFA				
0	19	5	14	< **0.001****
1	40	28	12	
2	50	42	8	
3	41	38	3	
NEWS-2	10 (0 – 17)	11 (1-17)	7 (0-14)	< **0.001**
ROX index	4.7 (1.9 – 31.7)	4.1 (1.9 – 31.7)	9.3 (2.7 – 23.6)	< **0.001**

** Fisher's Exact Test, statistically significant if p < 0.05

ϕ Mann-Whitney U Test, statistically significant if p < 0.05

Table 3. Leucocyte, differential count of leucocyte, platelet, and its ration in mortality group and survival group.

		Mortality in ICU		P ϕ
		Yes	No	
Total leucocyte x 10^3	15.15 (1.91 – 40.31)	15.21 (4.62 – 40.31)	15.03 (1.91 – 31.40)	0.711
Neutrophil	12.09 (1.08 – 37.11)	12.03 (1.08 – 37.11)	12.53 (1.18 – 27.34)	0.769
Lymphocyte	1.03 (0.17 – 11.51)	1.01 (0.17 – 11.51)	1.06 (0.33 – 5.72)	**0.050**
Monocyte	0.83 (0.02 – 3.44)	0.82 (0.02 – 3.44)	0.86 (0.04 – 2.41)	0.856
Platelet	283.50 (6.40 – 832.00)	269.00 (6.40 – 702.00) Mean: 278.24 (7.13)	316.00 (100.00 – 832.00) Mean: 367.41 (197.65)	**0.014*****
Neutrophil-Lymphocyte Ratio	11.17 (0.93 – 57.95)	11.76 (0.93 – 52.61)	10.26 (0.95 – 57.95)	0.142
Platelet-Lymphocyte Ratio	256.43 (7.36 – 1505.88)	264.86 (7.36 – 1505.88)	221.37 (58.80 – 1081.82)	0.843
Lymphocyte-Monocyte Ratio	1.25 (0.25 – 24.75)	1.20 (0.25 – 11.67)	1.37 (0.44 – 24.75)	0.151

ϕ Mann-Whitney U Test. statistically significant if p < 0.05
***T-test. statistically significant if p < 0.05

Albumin serum level was not analysis due to incomplete data.

Table 4. Differences between qSOFA, NEWS-2, and ROX index in the length of stay 1-5 days and > 5 days group.

		Length of stay		P ϕ
		1-5 days N=82 (57.3%)	>5 days N=61 (42.7%)	
qSOFA				
0	18	10	8	0.409
1	38	18	20	
2	48	28	20	
3	39	26	13	
NEWS-2		10 (0-17)	8 (0-16)	0.092
ROX index		4.25 (1.9 – 23.6)	4.9 (2.3 – 31.7)	0.359

Table 5. **Leucocyte, differential count of leucocyte, platelet, and its ratio in the length of stay 1-5 days and > 5 days group.**

	Length of stay		P ϕ
	1-5 days	>5 days	
Total leucocyte x 10^3	16.27 (4.62 – 40.31)	13.19 (5.17 – 33.61)	**0.043**
Neutrophil	13.78 (0.08 – 37.11)	10.44 (4.46 – 32.09)	0.081
Lymphocyte	1.02 (0.17 – 5.72)	1.06 (0.39 – 11.51)	0.890
Monocyte	0.89 (0.02 – 3.44)	0.81 (0.16 – 2.64)	0.481
Platelet	283.5 (15.0 – 832.0)	285.0 (6.4 – 634.0)	0.845
Neutrophil-Lymphocyte Ratio	12.32 (0.09 – 57.95)	9.81 (0.93 – 52.61)	0.121
Platelet-Lymphocyte Ratio	241.9 (13.03 – 1505.88)	262.07 (7.36 – 810.26)	0.677
Lymphocyte-Monocyte Ratio	1.12 (0.44 – 11.63)	1.25 (0.25 – 8.25)	0.538

ϕ Mann-Whitney U Test. statistically significant if p < 0.05

Adverse Events: There were no adverse events associated with this study