

Association between neutrophil to lymphocyte ratio and mortality among community acquired pneumonia patients: a Meta-analysis

Supplementary File 2

Full Analysis Output

Meta-analysis: Area under ROC curve (NLR at admission to predict 30-day mortality)

Variable for studies	Studies						
Variable for Area under ROC curve (AUC)	AUC						
Variable for Standard Error of AUC	SE						
Study	ROC Area	Standard Error	95% CI	z	P	Weight (%)	
						Fixed	Random
Zhang H. et al (2019)	0.810	0.0408	0.730 to 0.890			33.29	24.18
Curbelo J. et al (2017)	0.760	0.0612	0.640 to 0.880			14.80	18.03
LI Yi-fan. et al (2021)	0.709	0.0541	0.603 to 0.815			18.93	20.04
Ozmen et al. (2016)	0.650	0.0612	0.530 to 0.770			14.80	18.03
Avci and Perinecek (2020)	0.577	0.0552	0.469 to 0.685			18.19	19.72
Total (fixed effects)	0.717	0.0235	0.671 to 0.764	30.477	<0.001	100.00	100.00
Total (random effects)	0.706	0.0384	0.631 to 0.781	18.372	<0.001	100.00	100.00

Test for heterogeneity

Q	13.3419
DF	4
Significance level	P = 0.0097
I ² (inconsistency)	70.02%
95% CI for I ²	23.48 to 88.25

Publication bias

Egger's test	
Intercept	-6.6770
95% CI	-21.1209 to 7.7668
Significance level	P = 0.2376
Begg's test	
Kendall's Tau	-0.3162
Significance level	P = 0.4386

Meta-analysis: Area under ROC curve (NLR at 3-5 days to predict 30-Day Mortality)

Variable for studies	Studies						
Variable for Area under ROC curve (AUC)	AUC						
Variable for Standard Error of AUC	SE						
Study	ROC Area	Standard Error	95% CI	z	P	Weight (%)	
						Fixed	Random
Curbelo et al. (2019)	0.883	0.0454	0.794 to 0.972			50.55	50.55
Curbelo J. et al (2017)	0.880	0.0459	0.790 to 0.970			49.45	49.45
Total (fixed effects)	0.882	0.0323	0.818 to 0.945	27.310	<0.001	100.00	100.00
Total (random effects)	0.882	0.0323	0.818 to 0.945	27.310	<0.001	100.00	100.00

Meta-analysis: continuous measure (SMD of Admission NLR between survivors and 30-day Nonsurvivors)

Variable for studies	Studies									
1. Intervention groups										
Variable for number of cases	Number_of_Nonsurvivors									
Variable for mean	Mean_NLR_Nonsurvivors									
Variable for SD	SDnon									
2. Control groups										
Variable for number of cases	Number_of_Survivors									
Variable for mean	Mean_NLR_Survivors									
Variable for SD	SD									
Study	N1	N2	Total	SMD	SE	95% CI	t	P	Weight (%)	
									Fixed	Random
Cataudella E. et al (2017)	49	146	195	1.980	0.193	1.600 to 2.360			28.03	25.73
Curbelo J. et al (2017)	12	142	154	0.620	0.301	0.0245 to 1.215			11.46	22.64
LI Yi-fan. et al (2021)	31	99	130	0.630	0.208	0.218 to 1.042			23.97	25.32
Zhang H. et al (2019)	42	358	400	1.254	0.169	0.922 to 1.586			36.53	26.31
Total (fixed effects)	134	745	879	1.235	0.102	1.035 to 1.435	12.112	<0.001	100.00	100.00
Total (random effects)	134	745	879	1.139	0.318	0.514 to 1.764	3.579	<0.001	100.00	100.00

Test for heterogeneity

Q	27.5922
DF	3
Significance level	P < 0.0001
I ² (inconsistency)	89.13%
95% CI for I ²	74.88 to 95.29

Publication bias

Egger's test	
Intercept	-6.4617
95% CI	-42.6896 to 29.7662
Significance level	P = 0.5230
Begg's test	
Kendall's Tau	-0.3333
Significance level	P = 0.4969

Meta-analysis: continuous measure (SMD of 3-5 Day NLR between survivors and 30-day Nonsurvivors)

Variable for studies	Studies									
1. Intervention groups										
Variable for number of cases	Number_of_Nonsurvivors									
Variable for mean	Mean_NLR_Nonsurvivors									
Variable for SD	SDnon									
2. Control groups										
Variable for number of cases	Number_of_Survivors									
Variable for mean	Mean_NLR_Survivors									
Variable for SD	SD									
Study	N1	N2	Total	SMD	SE	95% CI	t	P	Weight (%)	
									Fixed	Random
Curbelo J. et al (2017)	12	142	154	2.278	0.326	1.634 to 2.922			30.29	47.96
LI Yi-fan. et al (2021)	31	99	130	1.063	0.215	0.638 to 1.488			69.71	52.04
Total (fixed effects)	43	241	284	1.431	0.179	1.078 to 1.784	7.973	<0.001	100.00	100.00

Total (random effects)	43	241	284	1.646	0.607	0.451 to 2.840	2.711	0.007	100.00	100.00
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Meta-analysis: continuous measure SMD of Admission NLR between survivors and In-hospital non-survivors)

Variable for studies	Studies
1. Intervention groups	
Variable for number of cases	Number_of_Nonsurvivors
Variable for mean	Mean_NLR_Nonsurvivors
Variable for SD	SDnon
2. Control groups	
Variable for number of cases	Number_of_Survivors
Variable for mean	Mean_NLR_Survivors
Variable for SD	SD

Study	N1	N2	Total	SMD	SE	95% CI	t	P	Weight (%)	
									Fixed	Random
Cheng et al. (2020)	129	1231	1360	1.249	0.0955	1.061 to 1.436			45.29	39.98
De Jager et al. (2012)	23	372	395	0.874	0.217	0.448 to 1.300			8.80	19.91
Feng et al. (2021)	121	1907	2028	0.948	0.0949	0.762 to 1.134			45.91	40.11
Total (fixed effects)	273	3510	3783	1.078	0.0643	0.952 to 1.204	16.762	<0.001	100.00	100.00
Total (random effects)	273	3510	3783	1.053	0.122	0.813 to 1.294	8.603	<0.001	100.00	100.00

Test for heterogeneity

Q	5.9572
DF	2
Significance level	P = 0.0509
I ² (inconsistency)	66.43%
95% CI for I ²	0.00 to 90.32

Publication bias

Egger's test	
Intercept	-1.8044
95% CI	-54.9991 to 51.3904

Significance level	P = 0.7409
Begg's test	
Kendall's Tau	0.3333
Significance level	P = 0.6015