Online Supplement

The Neutrophil Lymphocyte Ratio as a Predictor of Acute Exacerbations Among Patients with COPD in Uganda

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Supplement Table 1.

Multivariate analyses of associations with risk of COPD exacerbation using cox-proportional hazards model

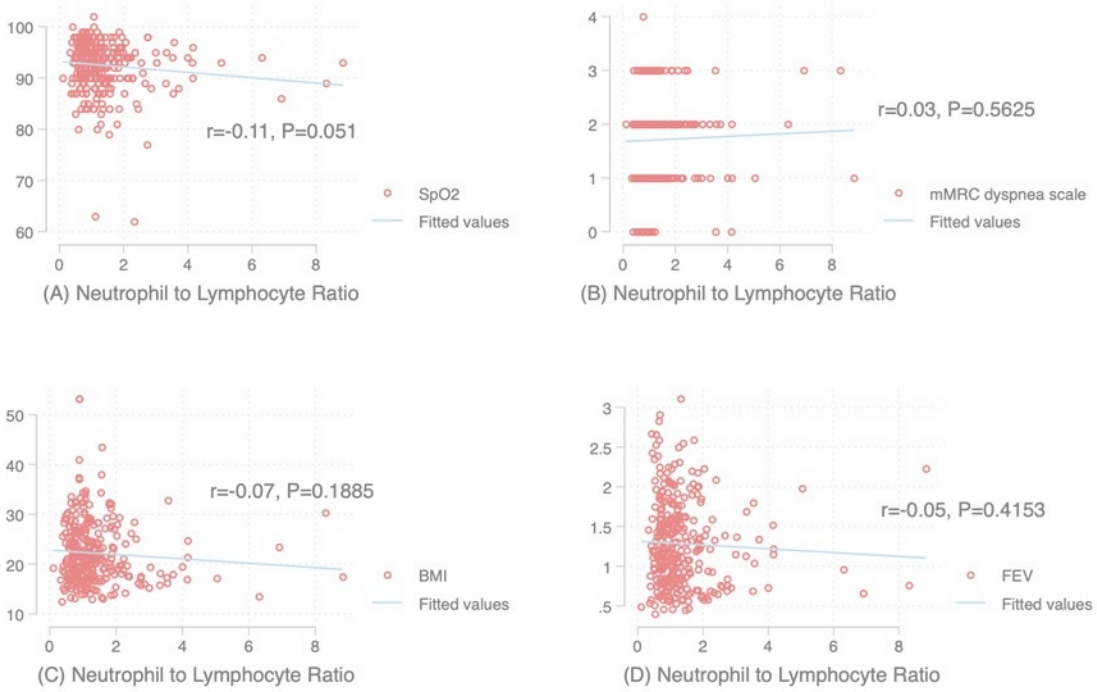
Variable	cHR[1] [95% CI]	P-value	aHR[2] [95% CI]	P-value
Neutrophil lymphocyte ratio				
<1.17	1		1	
≥1.17	2.96 [1.39, 6.33]	0.005	2.56 [1.02, 6.41]	0.044
HIV status				
Negative	1			
Positive	0.01 [0.39, 2.64]	0.976		
BMI				
Underweight	1			
Normal	0.85 [0.38, 1.89]	0.688		
Overweight	0.32 [0.07, 1.43]	0.135		
Obese	1.32 [0.46, 3.80]	0.608		
Age in years				
<60	1		1	
≥60	0.77 [0.38, 1.55]	0.459	0.65 [0.25, 1.74]	0.394
Smoking status				
Ever smoked	1		1	
Never smoked	1.30 [0.61, 2.77]	0.491	0.54[0.19, 1.56]	0.255
History of Hypertension				
No	1			
Yes	1.71 [0.79, 3.72]	0.174		
Previous TB treatment				
Yes	1			

No	1.10 [0.45, 2.67]	0.842		
Sex				
Male	1		1	
Female	1.81 [0.87, 3.78]	0.114	1.89 [0.64, 5.61]	0.252
POSTBD-FEV				
Mild >=80	1		1	
Moderate 50-79	0.67[0.22, 2.09]	0.494	0.43 [0.10, 1.81]	0.248
Severe 30-49	3.53[1.37, 9.10]	0.009	2.66 [0.80, 8.88]	0.111
Very severe <30	1.88 [0.47, 7.53]	0.371	2.48[0.48, 12.71]	0.277
mMRC Dyspnea				
1	1		1	
2 to 4	2.50 [1.09,5.71]	0.030	2.90 [1.11, 7.56]	0.030
Exacerbations at baseline				
No	1		1	
Yes	2.73 [1.56, 6.63]	0.002	1.89 [0.64, 5.61]	0.032

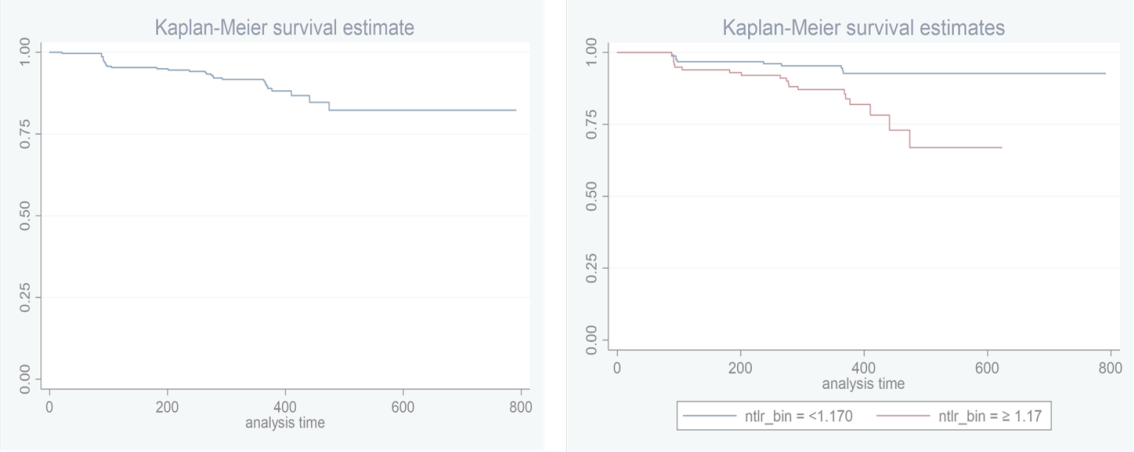
cHR[1]=Crude hazard ratio

aHR[2]=adjusted hazard ratio

Supplement Figure 1: correlation between neutrophil to Lymphocyte ratio (NLR) and clinical parameters at baseline. (A) NLR and SpO2, (B) NLR and mMRC, (C) NLR and BMI, (D) NLR and FEV_1. NLR at baseline was slightly correlated with SpO2.



Supplement Figure 2: Kaplan Meire survival graphs before and after stratification by neutrophil lymphocyte ratio.



Supplementary figures 2a and 2b showing Kaplan Meire survival graphs before and after stratification by neutrophil lymphocyte ratio.

Ntlr=Neutrophil Lymphocyte ratio.