



Figure S1. Distribution of hematological ratios after stratification for AKI stage.

Table S1. HRs (95% CI) for AKI <14 days after ED presentation.

Ratios	Univariate		Multivariate			
	Crude HR (95% CI)	Adjusted HR: Model 1 ^a (95% CI)	Adjusted HR: Model 2 ^b (95% CI)	Adjusted HR: Model 3 ^c (95% CI)	Adjusted HR: Model 4 ^d (95% CI)	
	Modified DNI					
Tertile 1, ≤ 0.5931	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 0.5931 - 2.7088	0.6 (0.4 - 0.9)	0.6 (0.4 - 1.0)	0.6 (0.4 - 1.0)			
Tertile 3, > 2.7088	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.3)	0.9 (0.6 - 1.3)	0.8 (0.6 - 1.3)	0.8 (0.6 - 1.3)
NLR						
Tertile 1, ≤ 4.2805	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 4.2805 - 10.2276	1.7 (1.1 - 2.8)	1.7 (1.0 - 2.7)	1.7 (1.0 - 2.7)	1.6 (1.0 - 2.7)	1.6 (0.9 - 2.6)	
Tertile 3, > 10.2276	2.6 (1.6 - 4.1)	2.4 (1.5 - 3.9)	2.3 (1.4 - 3.7)	2.3 (1.4 - 3.6)	2.1 (1.3 - 3.5)	
MLR						
Tertile 1, ≤ 0.5057	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 0.5057 - 0.9830	1.2 (0.8 - 1.8)	1.1 (0.7 - 1.7)	1.1 (0.7 - 1.7)	1.1 (0.7 - 1.7)	1.0 (0.7 - 1.6)	
Tertile 3, > 0.9830	1.2 (0.8 - 1.9)	1.1 (0.7 - 1.7)	1.1 (0.7 - 1.8)	1.1 (0.7 - 1.7)	1.1 (0.7 - 1.7)	
SMR						
Tertile 1, ≤ 6.7500	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 6.7500 - 11.9633	1.7 (1.0 - 2.7)	1.6 (1.0 - 2.6)	1.6 (1.0 - 2.6)	1.6 (1.0 - 2.6)	1.5 (0.9 - 2.4)	
Tertile 3, > 11.9633	2.4 (1.5 - 3.9)	2.4 (1.5 - 3.8)	2.3 (1.4 - 3.7)	2.2 (1.4 - 3.6)	2.1 (1.3 - 3.4)	
PLR						
Tertile 1, ≤ 161.6468	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 161.6468 - 314.6356	0.9 (0.6 - 1.5)	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.4)	0.9 (0.6 - 1.4)
Tertile 3, 314.6356	1.1 (0.7 - 1.7)	1.1 (0.7 - 1.6)	1.0 (0.7 - 1.6)	1.0 (0.7 - 1.6)	1.0 (0.7 - 1.5)	
NLPR						
Tertile 1, ≤ 1.9151	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 1.9151 - 5.0605	1.5 (0.9 - 2.4)	1.4 (0.8 - 2.3)	1.4 (0.8 - 2.3)	1.4 (0.8 - 2.3)	1.3 (0.8 - 2.2)	
Tertile 3, > 5.0605	2.8 (1.8 - 4.4)	2.6 (1.6 - 4.1)	2.5 (1.6 - 4.0)	2.5 (1.6 - 4.0)	2.4 (1.5 - 3.8)	
SII-index						
Tertile 1, ≤ 869.43	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 869.43 - 2414.46	1.6 (1.0 - 2.6)	1.6 (1.0 - 2.5)	1.6 (1.0 - 2.6)	1.5 (1.0 - 2.5)	1.5 (0.9 - 2.4)	
Tertile 3, > 2414.46	1.8 (1.1 - 2.8)	1.7 (1.1 - 2.8)	1.7 (1.1 - 2.7)	1.6 (1.0 - 2.6)	1.6 (1.0 - 2.5)	

Abbreviations: HR, Hazard Ratio; AKI, acute kidney injury; DNI, Delta neutrophil index; NLR, Neutrophil-to-lymphocyte ratio; MLR, Monocyte-to-lymphocyte ratio; SMR, Segmented neutrophil-to-monocyte ratio; PLR, Platelet-to-lymphocyte ratio; NLPR, Neutrophil-to-lymphocyte-platelet ratio; SII, Systemic immune-inflammation index

- a. Correction made for: age, gender.
- b. Correction made for: age, gender, comorbidity score, baseline renal function, immune status.
- c. Correction made for: age, gender, comorbidity score, baseline renal function, immune status, medication use.
- d. Correction made for: age, gender, comorbidity score, baseline renal function, immune status, medication use, disease severity, provisional diagnosis in the emergency department.

Table S2. HR's (95% CIs) for 14-day all-cause mortality.

Ratios	Univariate		Multivariate		
	Crude HR (95% CI)	Adjusted HR: Model 1 ^a (95% CI)	Adjusted HR: Model 2 ^b (95% CI)	Adjusted HR: Model 3 ^c (95% CI)	Adjusted HR: Model 4 ^d (95% CI)
Modified DNI					
Tertile 1, ≤ 0.5931	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 0.5931 - 2.7088	0.2 (0.1 - 0.6)	0.3 (0.1 - 0.7)	0.2 (0.1 - 0.7)	0.2 (0.1 - 0.6)	0.3 (0.1 - 0.7)
Tertile 3, > 2.7088	1.0 (0.5 - 1.8)	1.0 (0.6 - 1.9)	1.1 (0.6 - 2.0)	1.1 (0.6 - 2.0)	1.0 (0.5 - 1.9)
NLR					
Tertile 1, ≤ 4.2805	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 4.2805 - 10.2276	1.2 (0.5 - 2.7)	1.1 (0.5 - 2.4)	1.0 (0.5 - 2.4)	1.1 (0.5 - 2.5)	1.1 (0.5 - 2.4)
Tertile 3, > 10.2276	2.1 (1.0 - 4.3)	1.8 (0.9 - 3.7)	1.8 (0.9 - 3.8)	2.0 (1.0 - 4.1)	1.8 (0.8 - 3.7)
MLR					
Tertile 1, ≤ 0.5057	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 0.5057 - 0.9830	0.7 (0.3 - 1.5)	0.6 (0.3 - 1.3)	0.6 (0.3 - 1.3)	0.6 (0.3 - 1.3)	0.5 (0.2 - 1.2)
Tertile 3, > 0.9830	1.3 (0.7 - 2.4)	1.1 (0.6 - 2.1)	1.1 (0.6 - 2.1)	1.2 (0.6 - 2.2)	1.0 (0.5 - 2.0)
SMR					
Tertile 1, ≤ 6.7500	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 6.7500 - 11.9633	2.1 (0.9 - 4.9)	1.9 (0.8 - 4.5)	1.9 (0.8 - 4.3)	1.8 (0.8 - 4.3)	1.8 (0.8 - 4.3)
Tertile 3, > 11.9633	2.7 (1.2 - 6.3)	2.6 (1.2 - 5.9)	2.6 (1.2 - 5.9)	2.7 (1.2 - 6.2)	2.3 (1.0 - 5.4)
PLR					
Tertile 1, ≤ 161.6468	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 161.6468 - 314.6356	1.0 (0.4 - 2.3)	0.9 (0.4 - 2.2)	1.0 (0.4 - 2.2)	1.0 (0.4 - 2.3)	1.1 (0.5 - 2.5)
Tertile 3, 314.6356	2.3 (1.1 - 4.7)	2.1 (1.0 - 4.2)	2.0 (1.0 - 4.0)	2.0 (1.0 - 4.1)	1.9 (0.9 - 3.9)
NLPR					
Tertile 1, ≤ 1.9151	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 1.9151 - 5.0605	2.9 (1.2 - 6.8)	2.6 (1.1 - 6.2)	2.6 (1.1 - 6.3)	2.9 (1.2 - 6.8)	2.6 (1.1 - 6.3)
Tertile 3, > 5.0605	2.9 (1.2 - 6.8)	2.5 (1.0 - 5.9)	2.7 (1.1 - 6.4)	3.0 (1.2 - 7.1)	2.6 (1.1 - 6.3)
SII-index					
Tertile 1, ≤ 869.43	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)	1.0 (reference)
Tertile 2, 869.43 - 2414.46	0.5 (0.2 - 1.2)	0.5 (0.2 - 1.1)	0.5 (0.2 - 1.1)	0.5 (0.2 - 1.2)	0.5 (0.2 - 1.2)
Tertile 3, > 2414.46	1.9 (1.0 - 3.6)	1.7 (0.9 - 3.2)	1.6 (0.8 - 3.1)	1.7 (0.9 - 3.3)	1.5 (0.8 - 2.9)

Abbreviations: HR, Hazard Ratio; AKI, acute kidney injury; DNI, Delta neutrophil index; NLR, Neutrophil-to-lymphocyte ratio; MLR, Monocyte-to-lymphocyte ratio; SMR, Segmented neutrophil-to-monocyte ratio; PLR, Platelet-to-lymphocyte ratio; NLPR, Neutrophil-to-lymphocyte-platelet ratio; SII, Systemic immune-inflammation index

- a. Correction made for: age, gender.
- b. Correction made for: age, gender, comorbidity score, baseline renal function, immune status.
- c. Correction made for: age, gender, comorbidity score, baseline renal function, immune status, medication use.
- d. Correction made for: age, gender, comorbidity score, baseline renal function, immune status, medication use, disease severity, provisional diagnosis in the emergency department.