

SUPPLEMENTARY FILES

Supplementary Table S1. Baseline characteristics of the study sample.

Variables	Study sample (N=65)
Age (years)	57 (45-66)
Female sex	43 (66.2%)
Transplant duration (years)	8 (2-11)
Any vaccination dose	14 (21.5%)
Symptom duration upon hospital admission (days)	7 (3-11)
Comorbidities	
Arterial hypertension	53 (81.5%)
Diabetes mellitus	18 (27.7%)
Chronic heart failure	5 (7.7%)
Active smoking	5 (7.7%)
Atrial fibrillation	7 (10.8%)
Prior AMI	7 (10.8%)
Prior CVI	6 (9.2%)
PAD	10 (15.4%)
COPD/asthma	4 (6.2%)
Chronic immunosuppressive therapy	
Mycophenolate Mofetil	58 (89.2%)
Azathioprine	1 (1.5%)
Cyclosporine	20 (30.8%)
Tacrolimus	36 (55.4%)
Everolimus	8 (12.3%)
Sirolimus	3 (4.6%)
Prednisone	65 (100.0%)
COVID-19 related therapy	
Reconvalescent plasma	6 (9.2%)
Casirivimab/Imdevimab	2 (3.1%)
Remdesivir	44 (67.7%)
Oxygen therapy	24 (36.9%)

Data are expressed as number (percent) or median (interquartile range).

Abbreviations: AMI – acute myocardial infarction; COPD – chronic obstructive pulmonary disease; CVI – cerebrovascular incident; PAD – peripheral arterial disease.

Supplementary Table S2. Descriptive statistics of the derived laboratory biomarkers from the study.

Biomarkers	Study sample (N=65)
Neutrophile-to-lymphocyte ratio	5.55 (4.28-10.85)
Platelet-to-lymphocyte ratio	271.00 (183.67-395.35)
Monocyte-to-lymphocyte ratio	0.48 (0.37-0.73)
De Ritis ratio	1.31 (1.04-1.69)
CRP-to-albumin ratio	2.06 (0.82-2.82)
LDH-to-hemoglobin ratio	1.95 (1.53-2.84)
CRP-to-lymphocyte ratio	56.80 (22.19-124.53)
RDW-to-albumin ratio	0.41 (0.38-0.44)
Platelet-to-albumin ratio	5.63 (4.69-7.05)
D-Dimer-to-albumin ratio	0.02 (0.02-0.04)
D-Dimer-to-NLR ratio	0.15 (0.09-0.23)
LDH-to-albumin ratio	7.36 (5.82-10.86)
LDH-to-WBC ratio	41.03 (30.18-53.73)

Data are expressed as median (interquartile range).

Abbreviations: CRP – C-reactive protein; DD – D-dimers; Hgb – hemoglobin; HR – hazard ratios; LDH – lactate dehydrogenase; MLR – monocyte-to-lymphocyte ratio; NLR – neutrophile-to-lymphocyte ratio; Plt – platelets; PLR – platelet-to-lymphocyte ratio; RDW – red cell distribution width; WBC – white blood cells.

Supplementary Table S3. Comparison of ROC curves between the derived laboratory biomarkers from the study.

Variables	Neutrophile-to-lymphocyte ratio	Platelet-to-lymphocyte ratio	Monocyte-to-lymphocyte ratio	De Ritis ratio	CRP-to-albumin ratio	LDH-to-hemoglobin ratio	CRP-to-lymphocyte ratio	RDW-to-albumin ratio	Platelet-to-albumin ratio	D-Dimer-to-albumin ratio	D-Dimer-to-NLR ratio	LDH-to-albumin ratio	LDH-to-WBC ratio
Neutrophile-to-lymphocyte ratio		0.065 p=0.342	0.020 p=0.845	0.097 p=0.325	0.170 p=0.095	0.283 p<0.001	0.145 p=0.088	0.008 p=0.944	0.038 p=0.767	0.009 p=0.941	0.091 p=0.343	0.233 p=0.006	0.082 p=0.494
Platelet-to-lymphocyte ratio			0.044 p=0.713	0.161 p=0.155	0.234 p=0.047	0.347 p<0.001	0.209 p=0.012	0.057 p=0.667	0.027 p=0.831	0.056 p=0.650	0.027 p=0.827	0.297 p=0.005	0.146 p=0.189
Monocyte-to-lymphocyte ratio				0.117 p=0.256	0.190 p=0.128	0.303 p=0.008	0.165 p=0.213	0.013 p=0.924	0.017 p=0.899	0.012 p=0.923	0.071 p=0.521	0.253 p=0.027	0.102 p=0.455
De Ritis ratio					0.073 p=0.459	0.186 p=0.021	0.048 p=0.660	0.105 p=0.357	0.134 p=0.251	0.105 p=0.351	0.188 p=0.131	0.136 p=0.114	0.015 p=0.899
CRP-to-albumin ratio						0.113 p=0.082	0.025 p=0.710	0.178 p=0.096	0.208 p=0.052	0.178 p=0.091	0.261 p=0.021	0.063 p=0.355	0.088 p=0.389
LDH-to-hemoglobin ratio							0.138 p=0.064	0.291 p=0.001	0.321 p=0.001	0.292 p<0.001	0.374 p<0.001	0.050 p=0.080	0.201 p=0.014
CRP-to-lymphocyte ratio								0.153 p=0.188	0.182 p=0.111	0.153 p=0.166	0.236 p=0.061	0.088 p=0.266	0.063 p=0.476
RDW-to-albumin ratio									0.030 p=0.766	0.001 p=0.994	0.083 p=0.523	0.241 p=0.002	0.090 p=0.481
Platelet-to-albumin ratio										0.029 p=0.778	0.054 p=0.649	0.270 p=0.004	0.119 p=0.261
D-Dimer-to-albumin ratio											0.083 p=0.357	0.241 p=0.003	0.090 p=0.463
D-Dimer-to-NLR ratio												0.324 p=0.003	0.173 p=0.216
LDH-to-albumin ratio													0.151 p=0.095
LDH-to-WBC ratio													

*Data are presented as the difference between areas - method by *Hanley & McNeil* (1983).

Abbreviations: CRP – C-reactive protein; CI – confidence intervals; DD – D-dimers; Hgb – hemoglobin; HR – hazard ratios; LDH – lactate dehydrogenase; MLR – monocyte-to-lymphocyte ratio; NLR – neutrophile-to-lymphocyte ratio; Plt – platelets; PLR – platelet-to-lymphocyte ratio; RDW – red cell distribution width; WBC – white blood cells.

Supplementary Figure S1. Flow diagram.

