

## Supplementary material

*Kivrak A, Yildirim A. Relationship between systemic inflammation indices and time of onset of symptoms in cardiac remodeling after first ST-segment elevation myocardial infarction. Kardiol Pol. 2023.*

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**Table S1.** Distribution of angiographic findings by cardiac remodeling groups

Angiographic findings	All population n=512	LVAR		P-value
		No n=382	Yes n=130	
Door-to-balloon time, min	43.4 (8.2)	43.4 (8.5)	42.8 (7.4)	0.79
Symptom-to-balloon time, min	305.1 (57.3)	300.4 (54.6)	303.4 (64.1)	0.87
Grace score	124 (100-145)	116 (94-140)	134 (110-162)	0.006*
IRA, n (%)				
Cx	184 (35.9)	132 (34.6)	52 (40.0)	0.46
LAD	328 (64.1)	250 (65.4)	78 (60.0)	
Number of diseased vessels, n (%)				
1	366 (71.5)	284 (74.3)	82 (63.1)	0.11
≥2	146 (28.5)	98 (25.7)	48 (36.9)	
Pre-PCI TIMI flow, n (%)				
0	328 (64.1)	240 (62.8)	88 (67.7)	0.61
1	52 (10.2)	36 (9.4)	16 (12.3)	
2	58 (11.3)	48 (12.6)	10 (7.7)	
3	74 (14.5)	58 (15.2)	16 (12.3)	
Post-PCI TIMI flow >2, n (%)	488 (95.3)	366 (95.8)	122 (93.8)	0.76
Number of stents	1 (1-2)	1 (1-2)	1 (1-2)	0.12

Categorical variables were shown as number percentages. Numerical variables are mean (SD) or median (IQR). \* P-value <0.05 shows statistical significance. Cx, circumflex artery; IRA, infarct-related artery; LAD, left anterior descending artery; LVAR, left ventricular adverse remodeling; LVEF, left ventricular ejection fraction; LVEDV, left ventricular end-diastolic volume; LVESV, left ventricular end-systolic volume; PCI, percutaneous coronary intervention; TIMI, thrombolysis in myocardial infarction.

**Table S2.** Comparison of changes in echocardiographic findings at baseline and 6 months in cardiac remodeling groups

Variables	1 week post MI (Baseline)			6 months post-MI			$\Delta P$ -value
	LVAR		<i>P</i> -value	LVAR		<i>P</i> -value	
	No n=382	Yes n=130		No n=382	Yes n=130		
LVEF, %	48.5 (9.1)	49.1 (10.2)	0.53	52.4 (9.8)	45.5 (10.6)	<0.001*	<0.001*
LVEDV, mL	148 (120-170)	152 (125-180)	0.72	125 (110-145)	170 (138-200)	<0.001*	<0.001*
LVESV, mL	70 (55-90)	73 (55-95)	0.81	60 (51-80)	87 (65.2-117)	<0.001*	<0.001*
Stroke volume, mL	70.6 (17.2)	72.1 (14.8)	0.37	72.6 (16.4)	71.2 (16.0)	0.40	0.11

Numerical variables are mean (SD) or median (IQR). \* *P*-value <0.05 shows statistical significance.  $\Delta p$ : change of parameters at the post-MI periods in groups with LVAR vs without LVAR. LVAR, left ventricular adverse remodeling; LVEF, left ventricular ejection fraction; LVEDV, left ventricular end-diastolic volume; LVESV, left ventricular end-systolic volume.

**Table S3.** Findings associated with leukocyte-based inflammatory indices by time of onset of symptoms

Variables	SII		SIRI	
	r	P-value	r	P-value
<b>Morning hours</b>				
Door-to-balloon time	0.08	0.75	0.07	0.78
Symptom-to-balloon time	0.05	0.70	0.04	0.72
Grace score	0.30	0.005*	0.35	0.001*
Baseline LVEF	-0.45	<0.001*	-0.48	<0.001*
Baseline LVEDV	0.44	<0.001*	0.49	<0.001*
Baseline LVESV	0.40	<0.001*	0.43	<0.001*
ΔLVEF	-0.43	<0.001*	-0.45	<0.001*
ΔLVEDV	0.46	<0.001*	0.48	<0.001*
ΔLVESV	0.44	<0.001*	0.46	<0.001*
<b>Daytime hours</b>				
Door-to-balloon time	0.05	0.85	0.06	0.82
Symptom-to-balloon time	0.07	0.73	0.08	0.71
Grace score	0.33	<0.001*	0.37	<0.001*
Baseline LVEF	-0.36	<0.001*	-0.38	<0.001*
Baseline LVEDV	0.35	<0.001*	0.37	<0.001*
Baseline LVESV	0.32	0.002*	0.33	0.001*
ΔLVEF	-0.29	0.007*	-0.31	0.004*
ΔLVEDV	0.31	0.003*	0.34	0.001*
ΔLVESV	0.30	0.007*	0.32	0.001*
<b>Evening hours</b>				
Door-to-balloon time	0.13	0.64	0.11	0.63
Symptom-to-balloon time	0.15	0.68	0.12	0.61
Grace score	0.35	<0.001*	0.38	<0.001*
Baseline LVEF	-0.33	<0.001*	-0.37	<0.001*
Baseline LVEDV	0.32	0.001*	0.34	<0.001*
Baseline LVESV	0.30	0.008*	0.32	0.002*
ΔLVEF	-0.28	0.01*	-0.30	0.009*
ΔLVEDV	0.27	0.01*	0.29	0.01*
ΔLVESV	0.24	0.03*	0.25	0.02*
<b>Night hours</b>				
Door-to-balloon time	0.05	0.78	0.04	0.82
Symptom-to-balloon time	0.03	0.87	0.05	0.90
Grace score	0.29	0.01*	0.30	0.009*
Baseline LVEF	-0.23	0.04*	-0.26	0.03*
Baseline LVEDV	0.25	0.03*	0.26	0.03*
Baseline LVESV	0.22	0.05*	0.24	0.04*
ΔLVEF	-0.22	0.05*	-0.23	0.04*
ΔLVEDV	0.23	0.04*	0.25	0.03*
ΔLVESV	0.17	0.31	0.18	0.28

\* P-value <0.05 shows statistical significance. Δ: change of parameters at the post-MI periods. LVEF, left ventricular ejection fraction; LVEDV, left ventricular end-diastolic volume; LVESV, left ventricular end-systolic volume, SII, systemic immune inflammation index; SIRI, systemic inflammation response index.

**Table S4.** Diagnostic performance assessment of leukocyte-based inflammatory indices in predicting left ventricular adverse remodeling

ROC Curves statistic	SII	SIRI	NLR	PLR
AUC	0.77	0.84	0.68	0.62
95% CI	0.71-0.82	0.78-0.89	0.64-0.72	0.58-0.66
Sensitivity	55.4%	78.5%	69.2%	54.6%
Specificity	87.4%	74.3%	68.3%	63.5%
PPV	60.0%	51.0%	42.7%	35.0%
NPV	85.2%	91.0%	86.7%	81.0%
Threshold value	>1204.2	>2.5	>3.4	>112.7
<i>P</i> -value	<0.001*	<0.001*	<0.001*	<0.001*

\* *P*-value <0.05 shows statistical significance. AUC, area under the curve; CI, confidence interval; NPV, negative predictive value; PPV, positive predictive value; SE, standard error; SII, systemic immune inflammation index; SIRI, systemic inflammation response index.