

Supplementary material

Supplementary Table 1 Relationship between selected variables and in-hospital mortality.

	In-hospital survival	In-hospital mortality	p
No. of patients	1385	119	
Age, years	65 (21)	77 (17)	<0.001
Male, %	70.4	58.8	0.012
BMI, kg/m ²	27.1 (5.5)	26.8 (5.2)	0.878
Chest pain, %	83.3	62.2	<0.001
STEMI, %	47.7	56.3	0.056
Killip I	78.8	27.7	
Killip II	13.6	32.8	<0.001
Killip III	5.7	15.1	
Killip IV	1.9	24.4	
SBP, mmHg	142.7 (28.9)	117.2 (32.3)	<0.001
DBP, mmHg	81 (23)	66 (30)	<0.001
Heart rate, bpm	78 (23)	91 (34)	<0.001
Symptom onset-admission time, min	191 (413)	272 (568)	0.827

BMI: body mass index; DBP: diastolic blood pressure; SBP: systolic blood pressure; STEMI: ST-elevation myocardial infarction.

Supplementary Table 2 Relationship between selected variables and in-hospital cardiovascular mortality.

	In-hospital survival	In-hospital CV mortality	p
No. of patients	1396	108	
Age, years	66 (21)	78 (16)	<0.01
Male, %	70.3	58.3	0.009
BMI, kg/m ²	27.1 (5.5)	26.7 (5.1)	0.645
Chest pain, %	83.1	63.0	<0.001
STEMI, %	46.8	59.3	0.013
Killip I	78.4	27.8	
Killip II	13.7	32.4	<0.001
Killip III	5.9	13.0	
Killip IV	1.9	26.9	
SBP, mmHg	142.5 (28.9)	114.9 (34.1)	<0.001
DBP, mmHg	80.5 (23)	65 (28)	<0.001
Heart rate, bpm	78.0 (23)	90.5 (32)	<0.001
Symptom onset-admission time, min	191 (415)	281 (567)	0.840

BMI: body mass index; CV: cardiovascular; DBP: diastolic blood pressure; SBP: systolic blood pressure; STEMI: ST-elevation myocardial infarction.

Supplementary Table 3 Multivariate enter logistic regression analysis for in-hospital mortality.

	B	OR	95% CI	p
Male gender	-0.007	0.993	0.547-0.993	0.981
Diabetes	0.164	1.164	0.639-2.121	0.619
Previous MI	0.402	1.494	0.722-3.092	0.279
Previous HF	0.855	2.352	0.957-5.780	0.062
Previous CKD	0.573	1.774	0.790-3.983	0.165
No chest pain	0.006	1.006	0.542-1.869	0.984
Bleeding	0.143	1.154	0.481-2.772	0.748
Cardiogenic shock	4.340	76.726	39.657-148.445	<0.001
Mechanical complications	2.031	7.619	1.835-31.636	0.005
Invasive coronary angiography	-1.039	0.354	0.179-0.701	0.003
STEMI	0.390	1.477	0.792-2.754	0.220
KAsH score	0.004	1.004	1.001-1.008	0.012

Goodness of fit: Hosmer-Lemeshow test=8.529, 8 degrees of freedom, p=0.384. Constant B=-4.557 ±0.9.

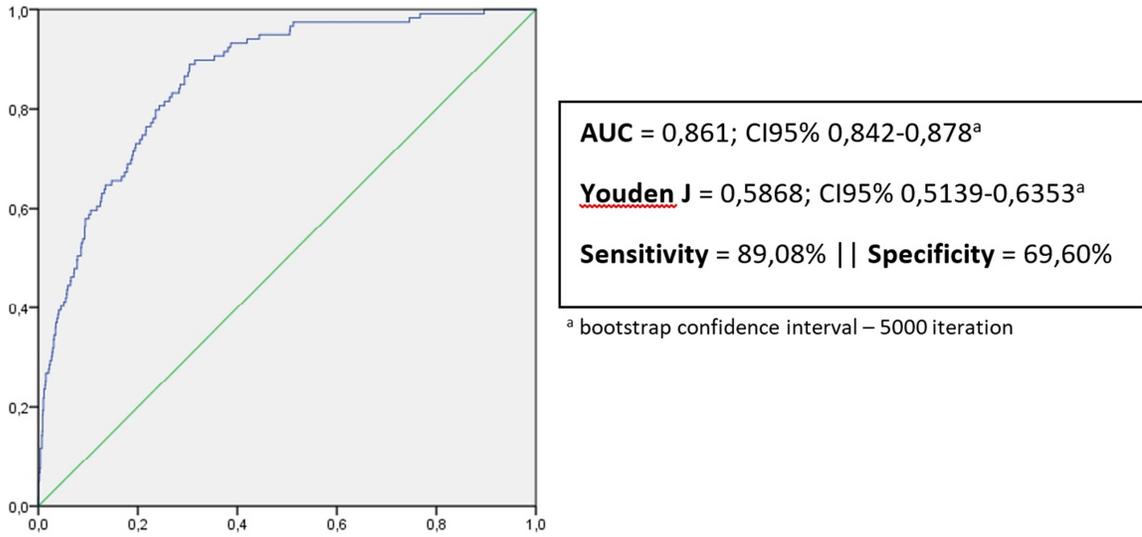
CI: confidence interval; CKD: chronic kidney disease; HF: heart failure; MI: myocardial infarction; OR: odds ratio; SBP: systolic blood pressure; STEMI: ST-elevation myocardial infarction.

Supplementary Table 4 Comparison of areas under the receiver operating characteristic curve for KAsH and other risk scores for predicting all-cause mortality.

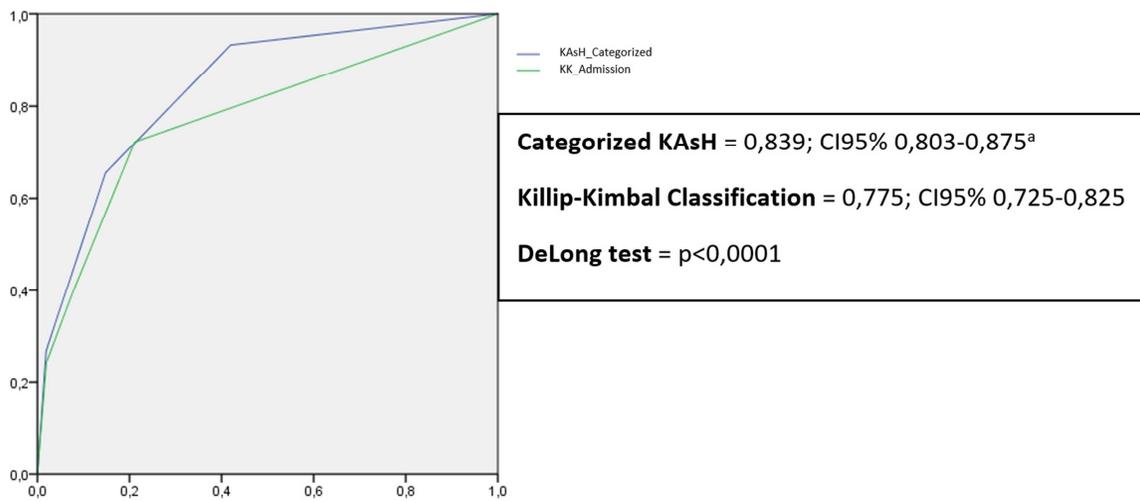
	KAsH	GRACE	ProACS	PURSUIT	TIMI	SRI	EMMACE	CHA ₂ DS ₂ -VASc-HS
MI	0.858	0.768 ^c	0.812 ^b	0.755 ^c	0.529 ^c	0.817 ^a	0.812 ^b	0.630 ^c
STEMI	0.896	0.807 ^c	0.844 ^c	0.776 ^c	0.523 ^c	0.872	0.859 ^a	0.643 ^c
NSTEMI	0.806	0.786	0.764	0.738 ^a	0.596 ^c	0.741 ^a	0.748	0.665 ^b
Age ≤65 years	0.847	0.729 ^a	0.804	0.701 ^a	0.456 ^c	0.781	0.777	0.571 ^c
Age >65 years	0.809	0.699 ^c	0.746 ^b	0.678 ^c	0.421 ^c	0.766	0.771	0.507 ^c
Killip ≤II	0.835	0.773 ^a	0.759 ^c	0.739 ^c	0.550 ^c	0.807	0.799	0.662 ^c
Killip >II	0.768	0.608 ^b	0.790	0.576 ^c	0.426 ^c	0.708 ^a	0.745	0.456 ^c
Diabetes	0.801	0.730	0.781	0.673 ^b	0.539 ^c	0.728	0.763	0.588 ^c
No diabetes	0.877	0.781 ^c	0.825 ^c	0.792 ^c	0.501 ^c	0.859	0.836 ^b	0.628 ^c

Results of the comparison of KAsH with each score by the DeLong test are marked as ^a p<0.05, ^b p<0.01, ^c p<0.001, other values p>0.05.

MI: myocardial infarction; NSTEMI: non-ST-elevation myocardial infarction; STEMI: ST-elevation myocardial infarction.



Supplementary Figure 1 Receiver operating characteristic curve analysis for the KAsH score. AUC: area under the curve; CI: confidence interval.



Supplementary Figure 2 Comparison of receiver operating curves for the categorized KAsH score and the Killip classification. CI: confidence interval.