

# HEART

## HEART score for chest pain patients

<b><u>H</u>istory (Anamnesis)</b>	Highly suspicious	2	
	Moderately suspicious	1	
	Slightly suspicious	0	
<b><u>E</u>CG</b>	Significant ST-deviation	2	
	Non-specific repolarisation disturbance / LBBB / PM	1	
	Normal	0	
<b><u>A</u>ge</b>	≥ 65 years	2	
	45 – 65 years	1	
	≤ 45 years	0	
<b><u>R</u>isk factors</b>	≥ 3 risk factors <i>or</i> history of atherosclerotic disease	2	
	1 or 2 risk factors	1	
	No risk factors known	0	
<b><u>T</u>roponin</b>	≥ 3x normal limit	2	
	1-3x normal limit	1	
	≤ normal limit	0	
		<b>Total</b>	

### Risk factors for atherosclerotic disease:

Hypercholesterolemia

Cigarette smoking

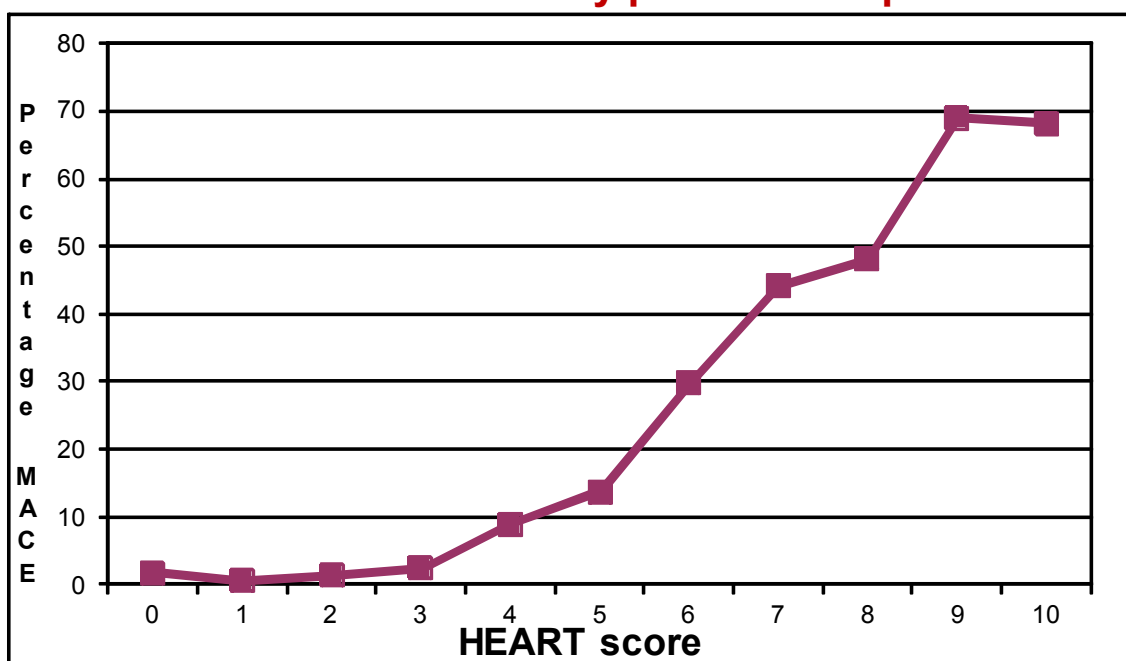
Hypertension

Positive family history

Diabetes Mellitus

Obesity (BMI>30)

## HEART score reliably predicts endpoints



HEART	~ % pts	MACE/n	MACE	Death	Proposed Policy
0-3	32%	38/1993	1.9%	0.05%	Discharge
4-6	51%	413/3136	13%	1.3%	Observation, risk management
7-10	17%	518/1045	50%	2.8%	Observation, treatment, CAG

\*MACE = Major Adverse Cardiac Event = Myocardial Infarction, PCI/CABG, all-cause death. Based on N=6174

### Literature:

1. Chest pain in the emergency room: value of the HEART score.  
Six AJ, Backus BE, Kelder JC. Neth Heart J. 2008;16:191-6.
2. Chest pain in the emergency room: a multicenter validation of the HEART Score.  
Backus BE, Six AJ, Kelder JC, et al. Crit Pathways in Cardiol. 2010;9:164-9.
3. A prospective validation of the HEART score for chest pain patients at the emergency department.  
Backus BE, Six AJ, Kelder JC, et al. Int J Cardiol. 2013;168:2153-8.
4. The HEART score for the assessment of patients with chest pain in the emergency department  
Six AJ, Cullen L, Backus BE, et al. Crit Pathways in Cardiol 2013;12:121-126.
5. Impact of using the HEART score in chest pain patients at the emergency department: a stepped wedge, cluster randomized trial. Poldervaart JM, et al. Annals of Internal Medicine. 2017. Epub ahead of print

### Questions and comments:

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