| HEART Score | | |
|--------------|--|-----|
| History | Highly suspicious | 2 |
| | Moderately suspicious | - |
| | Slightly or nonsuspicious | (|
| | | |
| ECG | Acute ischemia | - 2 |
| | LBBB, RBBB, LVH, PM | - |
| | No signs of acute ischemia | (|
| | | |
| Age | ≥ 65 years | - 7 |
| | 45 – 65 years | |
| | ≤ 45 years | (|
| Risk factors | \geq 3 risk factors, or history of atherosclerotic disease | |
| | 1 or 2 risk factors | |
| | No risk factors known | (|
| Troponin | > 42 ng/L | |
| Поронні | 15-42 ng/L | : |
| | ≤ 14 ng/L | (|

RULE-OUT REQUIRES:

HEART Score ≤3 points

Appendix, Table 1. HEART Score

Risk factors= Diabetes mellitus, current or recent (<30 days) smoker, hypertension, hypercholesterolemia, and family history of coronary artery disease.

| HEART Score | e | |
|--------------|---|---|
| History | Highly suspicious | 2 |
| | Moderately suspicious | 1 |
| | Slightly or nonsuspicious | |
| | | |
| ECG | Acute ischemia | |
| | LBBB, RBBB, LVH, PM | 1 |
| | No signs of acute ischemia | 0 |
| | | |
| Age | ≥ 65 years | 2 |
| | 45 – 65 years | |
| | ≤ 45 years | 0 |
| | | |
| Risk factors | ≥ 3 risk factors, or history of atherosclerotic disease | 2 |
| | 1 or 2 risk factors | 1 |
| | No risk factors known | 0 |
| | | |
| Troponin | > 42 ng/L | 2 |
| | 15-42 ng/L | 1 |
| | ≤ 14 ng/L | 0 |

HEART 0h/1h PATHWAY RULE-OUT REQUIRES:

HEART Score ≤3 points

AND

Oh hs-cTnT < 5 ng/L,

OR

Oh hs-cTnT < 12 ng/L with a 1h increase < 3ng/L

Appendix, Table 2. HEART Pathway

Risk factors= Diabetes mellitus, current or recent (<30 days) smoker, hypertension, hypercholesterolemia, and family history of coronary artery disease.

| EDAC Score | | | | |
|---|-----------|--|--|--|
| Male sex | +6 | | | |
| | τ0 | | | |
| Age | | | | |
| 18-45 | +2 | | | |
| 46-50 | +4 | | | |
| 51-55 | +6 | | | |
| 56-60 | +8 | | | |
| 61-65 | +10 | | | |
| 66-70 | +12 | | | |
| 71-75 | +14 | | | |
| 76-80 | +16 | | | |
| 81-86 | +18 | | | |
| 86+ | +20 | | | |
| 00+ | +20 | | | |
| Aged 18-50 years and either | | | | |
| known coronary artery disease | | | | |
| | +4 | | | |
| or ≥ 3 risk factors‡ | | | | |
| 2 3 115K 1actors+ | | | | |
| Symptoms and signs | | | | |
| Diaphoresis | +3 | | | |
| Radiates to arm or shoulder | +5 | | | |
| Pain worsened with inspiration | -4 | | | |
| Pain is reproduced by palpation | -6 | | | |
| Tam is reproduced by purpation | O | | | |
| | | | | |
| EDACCOL/1L ADD DILLE OUT I | DECHIDEC. | | | |
| EDACS 0h/1h-ADP RULE-OUT F | REQUIRES: | | | |
| | | | | |
| | | | | |
| EDACS < 16 points | | | | |
| | | | | |
| AND | | | | |
| | | | | |
| No sign of acute ischemia on the | ha FCC | | | |
| No sign of acute ischemia on the ECG | | | | |
| | | | | |
| AND | | | | |
| | | | | |
| 0h hs-cTnT < 5 ng/L, | | | | |
| <i>G</i> , , | | | | |
| OR | | | | |
| On the second | | | | |
| Ob he cTuT 412 mg/I with a 4h in ansatz 200 a/I | | | | |
| 0h hs-cTnT < 12 ng/L with a 1h increase < 3ng/L | | | | |

Appendix, Table 3. EDACS

EDACS= Emergency Department Assessment of Chest pain Score, ADP= Accelerated Diagnostic

Protocol, hs-cTnT= high-sensitivity troponin T, ECG= electrocardiography.

|| Coronary artery disease (CAD) defined as previous acute myocardial infarction, coronary artery bypass graft or percutaneous coronary intervention. ‡Risk factors = family history of premature CAD, dyslipidemia, diabetes, hypertension, and current smoker.

| | Patients included n=939 | Patients excluded n=228 | p-value |
|-----------------------------------|-------------------------|-------------------------|---------|
| General information | | | • |
| Age, years mean, SD | 60.6 (17.4) | 60.4 (18.4) | 0.91 |
| Male sex | 514 (54.7%) | 124 (54.4%) | 0.92 |
| | | | |
| History of | | | |
| Previous myocardial infarction | 188 (20.0%) | 46 (20.2%) | 0.96 |
| Previous angina | 197 (21.0%) | 42 (18.4%) | 0.39 |
| Previous revascularisation – CABG | 81 (8.6%) | 20 (8.8%) | 0.94 |
| Previous revascularization – PCI | 164 (17.5%) | 38 (16.7%) | 0.78 |
| Diabetes mellitus type 1 or 2 | 134 (14.3%) | 28 (12.3%) | 0.44 |
| Hypertension | 415 (44.2%) | 91 (39.9%) | 0.24 |

Appendix, Table 4. Comparison between included and excluded patients

*Values are mean (SD) or n (%).

SD – standard deviation, CABG- coronary artery bypass graft, PCI- percutaneous coronary intervention, ADP inhibitor- Adenosine diphosphate receptor inhibitor, ACE/ARB blocker- Angiotensin=converting enzyme inhibitor/ Angiotensin II receptor blocker, ECG- electrocardiogram, ACS- acute coronary syndrome, MACE-major adverse cardiac event

| | Sensitivity % (95% CI) | NPV % (95% CI) |
|--|---------------------------|--------------------|
| Early presenters (≤3h) | (5070 02) | (50.10 02) |
| HEART score ≤3 and 0h hs- cTnT <5 ng/L, n= 83 | 100.0 (92.0-100.0) | 100.0 (95.6-100.0) |
| EDACS<16 and non- ischemic ECG and 0h hs- cTnT <5 ng/L, n= 77 | 97.7 (88.0-99.9) | 98.7 (91.6-99.8) |
| Late presenters (>3h) | | |
| HEART score ≤3 and 0h hs- cTnT <5 ng/L, n= 178 | 100.0 (94.9-100.0) | 100.0 (97.9-100.0) |
| EDACS<16 and non- ischemic ECG and 0h hs- cTnT <5 ng/L, n= 174 | 97.6 (91.7-99.7) | 98.9 (95.9-99.7) |

Appendix, Table 5 Performance of the HEART score and the EDACS-ADP combined with a 0h hs-cTnT <5 ng/L for ruling out 30-day MACE in patients presenting early (\leq 3h) vs late (>3h).

EDACS= Emergency Department Assessment of Chest pain Score ADP= Accelerated Diagnostic Protocol hs-cTnT= troponin T MACE – major adverse cardiac events CI – confidence interval NPV=negative predictive value

^{*}Values are presented as proportions with 95% confidence intervals. 932 included patients, data on chest pain onset missing in seven.