Siemens – Hybrid

HS-TnI Algorithm

CP or angina equivalent

STOP Clinical judgment supersedes algorithm

STOP Not all injuries are MI's and not all MI's are ACS!

hs-cTnI: 0-hr and 1-hr

Strict rule out !

Lenient rule in !

(<5 ng/L **OR** Δ<2) **AND** *CPO ≥3 hrs

*CPO: chest pain onset

5-106 ng/L **OR** Δ=2-6 **OR** *CPO <3 hrs or Unk

≥107 ng/L **OR** Δ≥ 7

Rule out Zone

Indeterminate Zone

Abnormal Zone

Modified Heart Score (MHS)

use clinical judgment guided by:

hs-cTnI: 3-hr AND HEART score

MHS ≤3

MHS ≥4

0-3-hr Δ < 7 **AND** MHS ≤3

0-3-hr Δ ≥ 7 **OR** MHS ≥4

Consider admission, observation, or more evaluation.

D/C f/u PCP

Out-Patient stress test

If ACS suspected involve Cardiology early

The MODIFIED HEART Score for Chest Pain Patients in the ED		
History	• Highly Suspicious • Moderately Suspicious • Slightly or Non-Suspicious	• 2 points • 1 point • 0 points
ECG	• Significant ST-Depression • Nonspecific Repolarization • Normal	• 2 points • 1 point • 0 points
Age	• ≥ 65 years • > 45 - < 65 years • ≤ 45 years	• 2 points • 1 point • 0 points
Risk Factors	• ≥ 3 Risk Factors or History of CAD • 1 or 2 Risk Factors • No Risk Factors	• 2 points • 1 point • 0 points
Troponin (HS-TnI)	• > 34 ng/L • 4 – 34 ng/L • < 4 ng/L	• 2 points • 1 point • 0 points
Risk Factors: DM, current or recent (< one month) smoker, HTN ,HLP, family history of CAD, & obesity		