



**Note:**

\* For all patients with abnormal hs-cTnI results, check the medical record for prior results. Many patients have stable abnormalities in hs-cTnI and measured concentrations similar to the patient's baseline are reassuring.

ESC 2015 Guidelines advise that patients are unlikely to have an acute MI if:

- hs-cTn < Upper Limit of Normal (i.e. hs-cTnI < 19 ng/L) **AND**,
- >6 hrs since symptom onset **AND**,
- pain-free **AND**,
- the clinical presentation is Low Risk

However, coronary ischemia has not been definitively excluded and unstable angina must be considered. Disposition after a single hs-cTnI < 19 ng/L should only be considered for low risk patients with > 6 hrs since symptom onset and should be used cautiously.

All patients presenting less than 6-hours since symptom onset, with active symptoms or presentations that are not clearly low risk should have repeat hs-cTnI testing at 2 hours. For patients with rising troponin levels at 2-hours, concerning ongoing symptoms, or high risk clinical presentations, repeat testing at 4-hours and Cardiology consultation should be considered. Consider using a structured risk assessment tool such as the HEART score to aid risk stratification for all patients.

**HEART Score Calculation**

<b>History</b>	Highly suspicious	2	
	Moderately suspicious	1	
	Slightly suspicious	0	
<b>ECG</b>	Significant ST-depression	2	
	Non-specific repolarization disturbance, LBBB, LVH, Paced	1	
	Normal	0	
<b>Age</b>	≥ 65 years	2	
	45 - 64 years	1	
	≤ 44 years	0	
<b>Risk Factors</b>	<input type="checkbox"/> Diabetes <input type="checkbox"/> Current smoker <input type="checkbox"/> HTN (diagnosed) <input type="checkbox"/> HL (diagnosed) <input type="checkbox"/> Family hx CAD <input type="checkbox"/> Obesity	≥ 3 risk factors or history of atherosclerotic disease	2
		1 or 2 risk factors	1
		No risk factors known	0
<b>hs-cTnT (Peak)</b>	> 3x normal limit (43ng/L or greater)	2	
	1-3x normal limit (14-42ng/L)	1	
	< normal limit (<14ng/L)	0	
<b>Total (10 maximum)</b>			

**HEART Score Interpretation**

<b>Low Risk</b>	<b>0-3</b>
<b>Moderate Risk</b>	<b>4-6</b>
<b>High Risk</b>	<b>7-10</b>