ALBERTA PRECISION LABORATORIES
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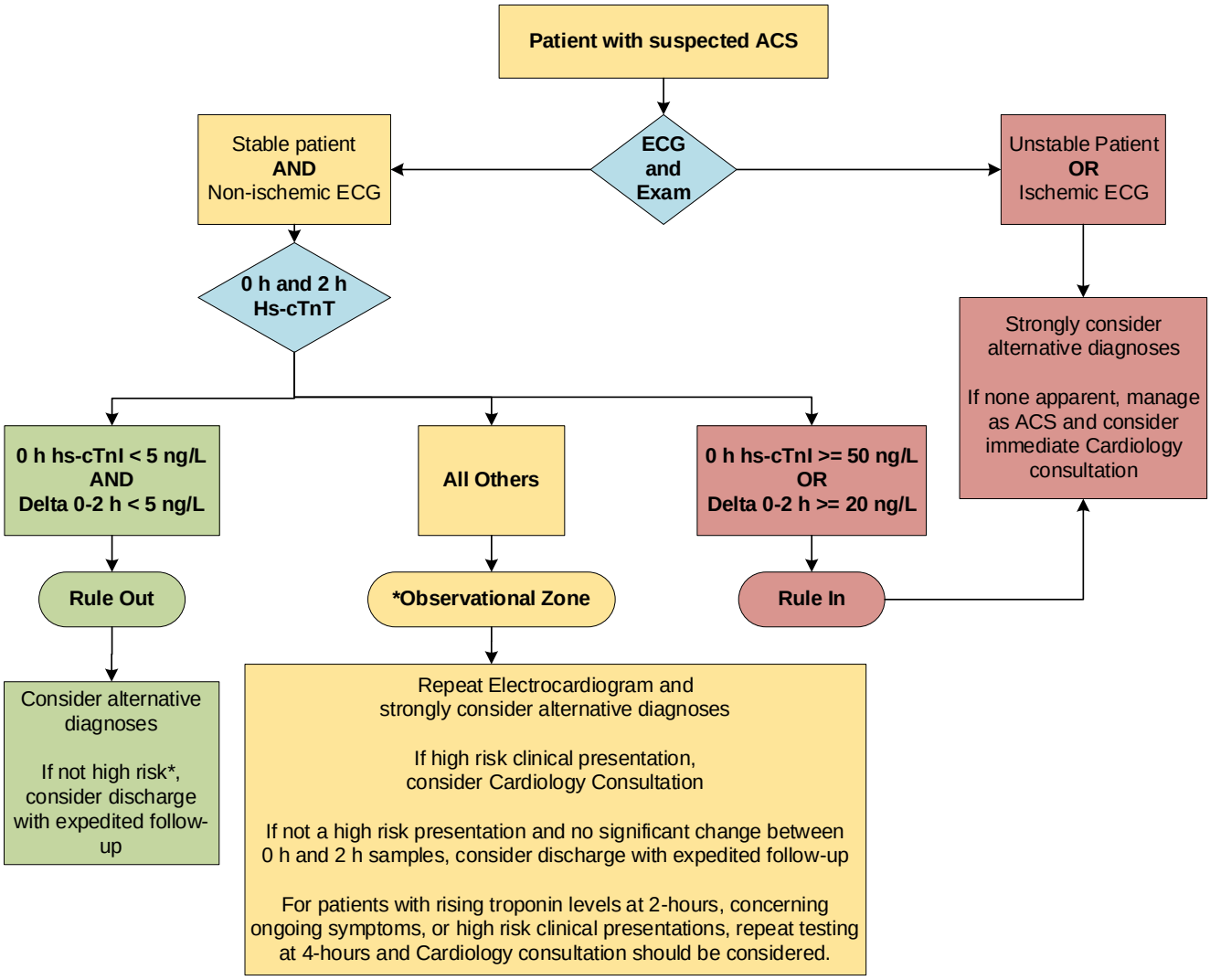
Chest Pain Pathway for Troponin I, High Sensitivity - Access - Calgary Rural Hospital (Canmore, High River)



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 measure 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 < 18 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 < 18 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			
History	Highly suspicious		2
	Moderately suspicious		1
	Slightly suspicious		0
ECG	Significant ST-depression		2
	Non-specific repolarization disturbance, LBBB, LVH, Paced		1
	Normal		0
Age	≥ 65 years		2
	45 – 64 years		1
	≤ 44 years		0
Risk Factors	☐ Diabetes ☐ Current smoker ☐ HTN (diagnosed) ☐ HL (diagnosed) ☐ Family hx CAD ☐ Obesity	≥ 3 risk factors or history of atherosclerotic disease	2
		1 or 2 risk factors	1
		No risk factors known	0
hs-cTnT (Peak)	> 3x normal limit (43ng/L or greater)		2
	1-3x normal limit (14-42ng/L)		1
	< normal limit (<14ng/L)		0
		Total (10 maximum)	

HEART Score Interpretation	
Low Risk	0-3
Moderate Risk	4-6
High Risk	7-10