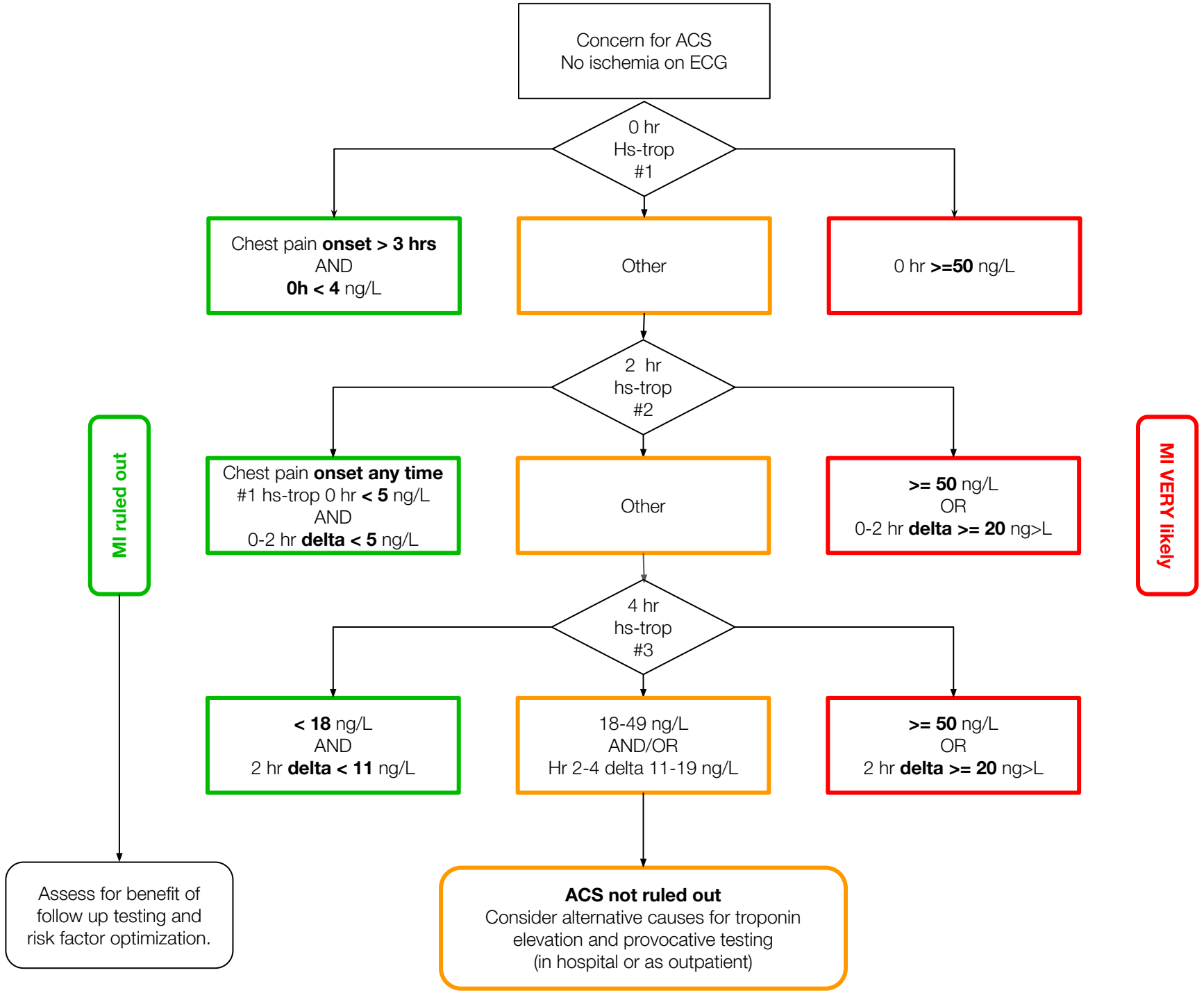

2019.11.25 S Vaillancourt (EM), A Ackery (EM), D Beriault (lab medicine), A Yan (Card) A Bagai (Card).

FAQ

1. Is this pathway **for all patients**?
   - **Yes**. This high sensitivity troponin (hs-trop) pathway was robustly developed and validated with cohorts that included all patients assessed for possible ACS (not just low risk). Clinical judgement is still warranted, in which case you would do serial testing.
2. How do we manage **Intermediate risk** patients?
   - There is no universal advice for this intermediate risk group. Serial troponin may help, consider alternative causes for troponin elevation (e.g. heart failure, pulmonary embolism, aortic dissection, renal failure) and provocative testing (in hospital or as outpatient).
3. How are the assay **units** different for high sensitivity troponin?
   - High sensitivity troponin are reported as a whole number in ng/L units. The old troponin assay reports (prior to Nov 2019) uses ug/L, which are 1000x smaller. 0.004 ug/L on the old troponin assay, is 4 ng/L on the high sensitivity troponin. But absolute numbers are not useful, percentile rank should guide interpretation.
4. How is the **99th percentile** cut-off different?
   - The 99th percentile cut-off is 0.040 ug/L (40 ng/L) on our the old Siemens troponin I assay, but is 18 ng/L on the Beckman high sensitivity troponin I assay. Different assays and tests mean these two numbers are comparable.

References

- Nestelberger T,et al. Two-Hour Algorithm for Rapid Triage of Suspected Acute Myocardial Infarction Using a High-Sensitivity Cardiac Troponin I Assay. Clinical Chemistry. 2019.
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- Emergency Medicine Cases on Low Risk Chest Pain and High Sensitivity Troponin 2019.
- Chapman AR, et al. Association of High-Sensitivity Cardiac Troponin I Concentration With Cardiac Outcomes in Patients With Suspected Acute Coronary Syndrome. JAMA. 2017.