

## Summary of Manitoba Troponin Guideline

### 1. In patients with a low likelihood of ACS:

- ⇒ Troponin must be measured at least six (6) hours after the onset of chest pain.
- ⇒ Troponin measurement may be deferred until six (6) hours after the onset of pain.
- ⇒ Troponin samples may be measured two (2) hours apart when measured at least 6 - 9 hours after the onset of chest pain (e.g. sample one at 6 hours after the onset of pain, sample two at 8 hours).
- ⇒ If Troponin measured  $\geq 9$  (nine) hours is negative, AMI may be safely ruled-out in patients with a low likelihood of ACS.

### 2. Troponin interpretation: (when measured $\geq 6 - 9$ hours after the onset of chest pain)

Interpretation of Troponin values (ask the Lab if you do not know which instrument your Tnl results are from)						
Troponin value	i-STAT Tnl $\mu\text{g/L}$	Dade Tnl $\mu\text{g/L}$	Bayer Tnl ultra	Roche TnT $\mu\text{g/L}$	Comment	Interpretation
Below 99 <sup>th</sup> ile	<0.08	<0.07	<0.04	< 0.01	Below 99 <sup>th</sup> ile.	No myocardial necrosis, if > 6 - 9 hrs after onset of symptoms.
Between (99 <sup>th</sup> ile) and functional sensitivity (10% CV)	0.08 to 0.10	0.07 to 0.21	0.04 to 0.07	0.01 to 0.03	Troponin present and can be distinguished from background but cannot be quantified repeatedly at this level	Possible myocardial injury, in the context of suspected ACS, repeat after two (2) hours (must be > 6 hrs after onset of symptoms)
Above functional sensitivity (10% CV or less)	>0.10	>0.21	>0.07	> 0.03	Definite myocardial necrosis, measurements are repeatable	NSTEMI when seen in the context of suspected ACS

### 3. A rising troponin level is required in order to diagnose AMI.

- 4. In patients with background elevations of troponin (e.g. patients with CRF), two (2) measurements are required to demonstrate a rising pattern.
- 5. No single serum marker used alone has sufficient sensitivity or specificity to reliably identify or exclude AMI within 6 hours after symptom onset.
- 6. Do not utilize cardiac serum marker tests to exclude unstable angina.
- 7. Document the time of onset of chest pain on all patients.

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