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| Subject: | ROMI PANEL (RULE OUT MYOCARDIAL INJURY PROFILE) | | | | |
| Approved by: Laboratory Director, Jerry Barker (electronic signature) | | | | | |
| Approved by: Laboratory Medical Director, Mark P. Burton, MD (electronic signature) | | | | | |
| Approved by: Affiliate Lab Medical Director, Chris Giampapa, MD (electronic signature) | | | | | |
| Approved by: Affiliate Lab Medical Director, Paul J. Sims, MD (electronic signature) | | | | | |
| Approved by: Affiliate Lab Medical Director, F.E. Williamson, MD (electronic signature) | | | | | |

ROMI PANEL (RULE OUT MYOCARDIAL INJURY PROFILE)

Cardiac troponin is the established biomarker in the diagnosis of acute coronary syndrome (ACS). Current consensus guidelines recommend use of the 99th percentile of the reference range for the employed assay as suggestive of myocardial injury.

Typically in ACS, cardiac troponin I is detectable in the bloodstream 4-6 hours after onset of chest pain with a peak at 12-16 hours, remaining elevated for several days thereafter.

Current assays are more sensitive than their predecessors; therefore minor elevation of troponin I may occur more frequently. While any troponin concentration above the 99th percentile of the reference range is abnormal, it may be difficult to interpret analytically significant yet clinically minor elevations. Conditions other than ACS resulting in myocardial cell damage can cause elevated troponin levels. These include demand ischemia (sepsis, tachyarrhythmias), direct myocardial damage (myocardial contusion, DC cardioversion, myocarditis, cardiac surgery), myocardial strain (heart failure, pulmonary hypertension, pulmonary embolism), and cardiac toxins.

Troponin I Reference Ranges

| | iSTAT Method performed at Affiliate Laboratories | VITROS Method performed in Core Lab and Emergency Room |
|---|---|---|
| Reference Range: Upper Reference limit for healthy individuals | ≤0.08 ng/mL | ≤0.034 ng/ml |
| Diagnostic AMI cutoff | NA | 0.12 ng/ml: |
| Additional Interpretative Data: | > 0.08 ng/mL may be indicative of myocardial injury. | 0.034-0.12 ng/mL Suspicious for myocardial injury. Serial measurements may be necessary to confirm or exclude the diagnosis of acute coronary syndrome |

Testing Protocol:

1. ROMI panel is ordered upon presentation of patient with complaint of chest pain. 1st specimen collected is the "onset".
2. For ROMI Panels at the Affiliate Laboratories the onset, 3 hr, 6 hr and 12 hr will be performed by the iSTAT method. A critical troponin (> 0.08 ng/mL) is only called and faxed to the licensed caregiver with the first occurrence.
3. For ROMI Panels at JMCGH (Core lab and the Emergency Department) the onset, 3 hr, 6 hr, and 12 hr will all be performed using the VITROS method. A critical troponin (≥ 0.12 ng/mL) is only called and faxed to the license caregiver with the first occurrence.