

Bulletin

Technical

Discontinuation of MI PANEL (Cardiac Marker Panel) And Triglyceride Reference Range Change

Methodist Pathology Center will discontinue the MI Panel (cardiac marker panel) effective **Tuesday**, January 26, 2010.

The MI PANEL (**cardiac marker panel**), which now includes troponin T, CK-MB, total CK, and myoglobin, will no longer exist as a panel. Beginning **January 26th**, the cardiac marker performed will be **troponin T only**, with no change in methodology. This is in keeping with current guidelines, and laboratory practices.¹
² CK-MB, total CK and myoglobin will **still be available on an individual basis**.

The cited references make the following recommendations:

- The contemporary **definition of myocardial infarction** is as follows¹:
Rise and / or fall of cardiac biomarkers (preferably troponin) with at least one value above the 99th percentile of the upper reference limit WITH one of the following:
 - Symptoms of ischemia
 - ECG changes (new ST-T changes or LBBB)
 - Pathologic Q waves
 - Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.
- “Cardiac **troponin is the preferred marker** for the diagnosis of MI. CK-MB by mass assay is an acceptable alternative when cardiac troponin is not available.”^{1,2}
- For patients who present within 6 h. of the onset of symptoms, [**myoglobin**] may be considered in addition.²

Thank you to Dr. Cassling, Medical Director Invasive Cardiology, Methodist Hospital, Dr. Olson, Medical Director Cardiology Methodist Hospital, and Dr. Peters, Medical Director Noninvasive Cardiology, Methodist Hospital, who have provided counsel for these testing changes.

Specimen requirements: Lithium heparin plasma, EDTA plasma, or serum is acceptable specimens. Stable refrigerated one day otherwise freeze. Test availability is 24/7.

Please contact Dr. Tom Williams (402-354-4540) with questions or comments.

1. Universal Definition of Myocardial Infarction. Expert Consensus Document. Joint ESC/ACCF/AHA/WHF Task Force for the Redefinition of Myocardial Infarction. Circulation. Nov. 2007. American Heart Association. On line: <http://circ.ahajournals.org>

2. Biomarkers of Acute Coronary Syndromes and Heart Failure. Laboratory Medicine Practice Guideline, National Academy of Clinical Biochemistry and stakeholders. American Association for Clinical Chemistry. On line: www.nacb.org

Reference Range change for Triglyceride

The adult reference range for triglycerides has been changed from 0-200 mg/dL to 0- 150 mg/dL. This is based on the National Cholesterol Education Program (NCEP) guidelines for clinical cut points that indicate relative risk for coronary heart disease. Pediatric reference ranges have not changed. There are less than 20 years 50-140 mg/dL.