

# Legacy Laboratory Services

## Legacy Lab Alert

April 2019

An Important Update from Legacy Laboratory Services

### **Update: Test Consolidation of CK-MB Due to Low Utility**

The 2014 American Heart Association (AHA)/ American College of Cardiology (ACC) guidelines concluded that **creatinine kinase-MB (CK-MB) provides no additional value for diagnosing acute myocardial infarction (AMI)**.<sup>1</sup> Since the 2000 ACC/ European Society of Cardiology (ESC) redefinition of AMI, which was revised into the 2007 and 2012 Universal Definition of AMI, **cardiac troponin has been the biomarker of choice** owing to its myocardial tissue specificity and high clinical sensitivity for myocardial injury.<sup>2,3</sup> Cardiac troponin is preferred by both clinical (ACC, ESC, and AHA) and biochemical (National Academy of Clinical Biochemistry) guideline groups, for similar reasons.<sup>1,4-7</sup>

Due to low utility, Legacy Laboratory Services (LLS) will be consolidating CK-MB to Legacy Emanuel (EH) and Silverton (SV) Laboratories. **Effective April 17, 2019, Legacy Good Samaritan (GS), Mount Hood (MH), Meridian Park (MP), and Salmon Creek (SC) Laboratories will no longer perform CK-MB testing and specimens will be routed to Legacy Emanuel Laboratory.** All six laboratories will continue to perform troponin I and total creatine kinase (CK) in-house. The panel that includes troponin I, CK-MB, and total CK (CK/MB/TROP) was discontinued on February 29 and requests for CK-MB (with total CK) and troponin I must be ordered individually. A summary of the changes can be found in Table 1.

**Table 1: Summary of Changes to CK-MB and Related Testing**

Description	Mnemonic	Changes
CK/MB Index Panel (includes CK-MB and Total CK)	CK/MB or CKPAN	Tests ordered at GS, MP, MH, and SC will be sent to EH for CK-MB <u>AND</u> CK testing. SV will continue to perform CK-MB and CK in-house.
Troponin I Level	TROPONI	No changes. EH, GS, MP, MH, SC, and SV will continue to perform troponin I in-house.
CK	CK	EH, GS, MP, MH, SC, and SV will continue to perform CK in-house. However, if CK is ordered as part of the CK-MB orderable (CK/MB or CKPAN), specimens will be sent to EH for both CK and CK-MB testing.
CK/MB/Index Troponin Panel (includes CK-MB, Total CK, and Troponin I)	CK/MB/TROP or CKTROP	Panel was discontinued on 2/29/19. Order CK-MB (with total CK) and troponin I separately.

#### **REFERENCES:**

1. Amsterdam EA, Wenger NK, Brindis RG, et al; American College of Cardiology; American Heart Association Task Force on Practice Guidelines; Society for Cardiovascular Angiography and Interventions; Society of Thoracic Surgeons; American Association for Clinical Chemistry. 2014 AHA/ACC Guideline for the Management of Patients with Non-ST-Elevation Acute Coronary Syndromes: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol. 2014; 64(24): e139-e228.

2. Thygesen K, Alpert JS, White HD, et al; Joint ESC/ ACCF/ AHA/ WHF Task Force for the Redefinition of Myocardial Infarction. Universal definition of myocardial infarction. *Circulation*. 2007; 116(22): 2634-2653.
3. Thygesen K, Alpert JS, Jaffe AS, et al; Joint ESC/ ACCF/ AHA/ WHF Task Force for the Universal Definition of Myocardial Infarction. Third universal definition of myocardial infarction. *Circulation*. 2012; 126(16): 2020-2035.
4. Anderson JL, Adams CD, Antman EM, et al. 2012 ACCF/ AHA focused update incorporated into the ACCF/AHA 2007 guidelines for the management of patients with unstable angina/ non-ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/ American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol*. 2013; 61(23): e179-e347.
5. O'Gara PT, Kushner FG, Ascheim DD, et al; American College of Emergency Physicians; Society for Cardiovascular Angiography and Interventions. 2013 ACCF/AHA guideline for the management of ST elevation myocardial infarction. *J Am Coll Cardiol*. 2013; 61(4): e78-e140.
6. Apple FS, Jesse RL, Newby LK, et al; IFCC Committee on Standardization of Markers of Cardiac Damage; National Academy of Clinical Biochemistry. National Academy of Clinical Biochemistry and IFCC Committee for Standardization of Markers of Cardiac Damage Laboratory Medicine Practice Guidelines: analytical issues for biochemical markers of acute coronary syndromes. *Clin Chem*. 2007; 53(4): 547-551.
7. Morrow DA, Cannon CP, Jesse RL, et al; National Academy of Clinical Biochemistry. National Academy of Clinical Biochemistry Laboratory Medicine Practice Guidelines: clinical characteristics and utilization of biochemical markers in acute coronary syndromes. *Clin Chem*. 2007; 53(4): 552-574.

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