

## TROPONIN T

The development of more sensitive and specific biomarkers and more exact imaging techniques has given rise to the ability to detect progressively smaller amounts of myocardial necrosis.<sup>1</sup> As a result, a universal *redefinition* of myocardial infarction (MI) has been instituted. The preferred biomarkers for MI are cardiac troponins (cTn), and the redefinition classifies an increased cTn value as one that exceeds the 99th percentile of a normal reference population using an assay with an optimal imprecision equal to or less than 10%.<sup>1,2</sup> Crucial to the diagnosis of MI is detection of a rise and/or fall of that value.<sup>1</sup> Until recently, cTn assays that met the MI redefinition performance criteria were not widely available. LabCorp now offers a highly sensitive cardiac troponin T (cTnT) assay that performs in accordance with the parameters described in the MI redefinition. LabCorp's cardiac troponin T assay can assist in the following<sup>2</sup>:

- Differential diagnosis of acute coronary syndrome (ACS) to identify the necrosis associated with MI
- Risk stratification in patients presenting with ACS
- Risk stratification for cardiovascular morbidity and mortality in patients with chronic renal failure
- Selection of more intensive therapy and intervention in patients with elevated cTnT levels

Beyond MI and ACS, the high-sensitivity cTnT assay may play a role in the risk stratification of patients with other chronic diseases, such as heart failure (HF) and coronary artery disease (CAD), wherein myocardial injury may occur.<sup>2,3</sup> Studies have demonstrated a strong, consistent relationship between elevated cTnT levels and cardiovascular mortality in these patient populations, and, in many of these cases, increased levels of cTnT identify patients with poorer prognoses.<sup>2,3</sup>

### Troponin T **140150**

Please visit the online Test Menu at [www.LabCorp.com](http://www.LabCorp.com) for full test information, including CPT codes and specimen collection requirements.

#### REFERENCES

1. Thygesen T, Alpert JS, White HD. Universal definition of myocardial infarction. *J Am Coll Cardiol*. 2007;(50):2173-2195.
2. Troponin T [package insert]. Indianapolis, Ind: Roche Diagnostics Corporation; 2010.
3. De Lemos JA, Drazner MH, Omland T, et al. Association of troponin T detected with a highly sensitive assay and cardiac structure and mortality risk in the general population. *JAMA*. 2010;(304)22:2503-2512.