



High Sensitivity Troponin Testing

Summary

In April 2019, Lavery Pathology upgraded the troponin I assay used throughout our laboratory network to the new Beckman high sensitivity troponin I assay.

What's New

Lavery Pathology has introduced the Beckman high sensitivity troponin assay throughout our network of laboratories. The new assay replaces the Beckman's previous, 'contemporary', assay at our branch laboratories and the Siemens Centaur assay at our central laboratory.

The change simplifies troponin testing across our network. Differences in patient results occur between different troponin I assays. It is particularly important to note that differences may be seen between results from the previous Beckman 'contemporary' assay and the new Beckman high sensitivity assay. Consequently, despite being from the same manufacturer, results from these two assays cannot be directly compared.

The decision limit for troponin results is the 99th percentile of the healthy population. For the Beckman high sensitivity assay these are:

MEN	WOMEN
	
≤ 20 ng/L	≤ 10 ng/L

Troponin Testing in General Practice

Patients with suspected acute coronary syndrome (ACS) should be sent to hospital without delay. Troponin testing in general practice should only be considered if all of the following criteria are met:¹

- NO chest pain for at least 24 hours
- NO high-risk features (syncope, heart failure, abnormal ECG)
- The result will alter patient management
- The doctor's mobile phone number is written on the request form

Following up abnormal troponin results is the responsibility of the requesting doctor.

Other Causes of Raised Troponin

Increased troponin may be seen in the context of a variety of non-ACS conditions causing heart muscle injury. These can be differentiated by history and serial testing. Some of the non-ACS causes of increased troponin include:²

- Acute pulmonary embolism
- End-stage kidney disease
- Strenuous exercise
- Heart failure
- Pericarditis/myocarditis
- Cardioversion
- Blunt chest trauma
- Sepsis/critical illness

For further information please contact one of our Chemical Pathologists
Dr Chris Farrell or Dr Lan Nguyen, on 02 9005 7000.

REFERENCES:

1. Aroney CN, Cullen L. Appropriate use of serum troponin testing in general practice: a narrative review. Med J Aust 2016;205:91-4.
2. Korff S, Katus H, Giannitsis E. Differential diagnosis of elevated troponins. Heart 2006;92:987-93.

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