

## Changes from Troponin I to Troponin T

### On Tuesday 7th July at 10.00

The laboratory is changing to high sensitivity cardiac troponin T due to the large scale change of analysers as part of the laboratory and service reconfigurations that SWLP is undertaking .

This will mean that the cardiac markers in use at Croydon, Kingston and St George's will be the same and will be the same as those recently recommended by NICE in DG 15.

The 99<sup>th</sup> percentile of the assay is 14 ng/L.

A significant change in troponin is more than 7 ng/L over 3 hours.

Single measurements of troponin should not be performed. Sequential measurements of troponin are required for diagnosis and should be performed on admission and 3 hours later irrespective of time on onset of chest pain.

After the laboratory transfers to Troponin T, they will produce a list of all Troponin I requests from the previous 24hrs and analyse them for Troponin T

A rise of troponin of >7ng/L to a value above 14 ng/L indicates acute myocardial injury. This may be due to acute myocardial infarction (AMI) or secondary to a range of clinical conditions which have associated myocardial injury (myocarditis, SVT, pneumonia, pulmonary embolus are examples).

A value exceeding 200 ng/L is strongly suggestive of acute myocardial infarction.

The diagnosis of AMI as defined in the Universal Definition is clinical and requires a significant change in troponin to above the 99<sup>th</sup> percentile plus electrocardiographic evidence and/or appropriate clinical features. It should not be made solely on the basis of an elevated troponin and a changing troponin value<sup>1, 2</sup>.

If you require further information regarding these changes please contact the duty biochemist on bleep 6032

#### Reference List

1. Thygesen K, Alpert JS, Jaffe AS et al. Third universal definition of myocardial infarction. Eur Heart J 2012.
2. Thygesen K, Mair J, Giannitsis E et al. How to use high-sensitivity cardiac troponins in acute cardiac care. Eur Heart J 2012;33(18):2252-2257.

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### Where can I find out more?

If you have any further questions about South West London Pathology or the changes taking place in Clinical Blood Sciences look on our website [www.swlpath.nhs.uk](http://www.swlpath.nhs.uk) or email us at: [SWLPcomms@stgeorges.nhs.uk](mailto:SWLPcomms@stgeorges.nhs.uk)