March 19, 2013 - Northwest Washington and Alaska

Troponin Reference Range Change

WHAT’S NEW?
Effective Tuesday, March 26, 2013, the PeaceHealth laboratories in Bellingham and Friday Harbor, Washington and Ketchikan, Alaska will lower the troponin cutoff to 0.07 ng/mL for both the laboratory and Point of Care troponin methods. This new cutoff level increases the test sensitivity to detect myocardial damage and implements an interpretive scheme based on the 99th percentile of values in the normal population.¹

Based on the 2007 American College of Cardiology and the American Heart Association guidelines,² the normal troponin reference range and interpretations will be as follows:

<table>
<thead>
<tr>
<th>TESTS AFFECTED</th>
<th>Troponin I Reference Range</th>
<th>OLD</th>
<th>NEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;0.10 ng/mL</td>
<td></td>
<td>&lt;0.06 ng/mL</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>0.07–0.49 ng/mL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistent with Myocardial Necrosis</td>
<td>&gt;0.50 ng/mL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indeterminate Troponin Reference Range: 0.07–0.49 ng/mL

PeaceHealth Laboratories’ cardiac troponin I levels >0.5 ng/mL have a 96% sensitivity and a 94% specificity for acute myocardial infarction (AMI) and are thus less likely to be from a non-ischemic cause.

Values <0.5 ng/mL may be from ischemic or non-ischemic causes depending on the clinical criteria. For this reason, the troponin I range from 0.07–0.49 ng/mL will be considered indeterminate reflecting the greater likelihood of a non-ischemic cause for the elevated troponin I.

Flagging and Phoning of Results
Results >0.06 ng/mL for both laboratory and Point of Care troponin methods will be indicated with an “H flag” to indicate a higher than normal level. Point of Care troponin results are released without operator intervention and are not phoned by the laboratory.

For troponin testing performed at the Bellingham laboratory, the first result >0.06 ng/mL will be phoned. Subsequent elevated results are not phoned.

QUESTIONS?
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REFERENCES