

Clinical Laboratory Communication

Notification Date: March 9, 2019

Effective Date: April 9, 2019

Troponin 5th Generation

Explanation: Beginning April 9th, the current Troponin 4th Generation test will be replaced with Troponin 5th Generation test. 5th Generation Troponin T is a high-sensitivity test and biomarker of choice for the detection of myocardial injury. Interpretation and Elevation begins early after myocardial injury and may remain elevated for more than 14 days. Interpretation and risk stratification requires the integration of clinical data. Elevated values may not be due to acute myocardial infarction however may indicate myocardial injury (acute or chronic). A rising and/or falling pattern distinguishes acute from chronic myocardial injury. Patient's with stable increases in Troponin 5th Generation are at increased long term risk however should not require hospitalization based solely on a single lab result.

Troponin 5th Generation Need to Know:

- Critical Value Change:** Troponin 5th Generation Critical Value is ≥ 53 ng/L
 - First Troponin 5th Generation of greater than or equal to 53 ng/L will be called.
 - Any additional Troponin 5th Generation results ≥ 53 ng/L during the same visit will NOT be called.
- Reporting Unit Change:** Reporting units are changing from ng/mL (reporting in decimals) to ng/L (reporting whole numbers)
- Reference Range:**

Male	≤ 15 ng/L
Female	≤ 10 ng/L

Preferred	Acceptable
Lithium Heparin Gel	Lithium Heparin No Gel

Collection Matters!

Samples that have visible hemolysis may be rejected. The lab will call the ordering location and request a new specimen. If the ordering location does not want to collect a new specimen, test will be result with the comment – **Grossly Hemolyzed. Result unreliable. Repeat testing advised on a non hemolyzed specimen.**

Be careful when drawing from IV starts or lines as these collections can cause hemolysis.

4. Collection:



5. Specimen Stability and Sample Volume:

Stability after separating from cells – Refrigerated: 24 hours **Frozen: 12 months**
Sample Volume - Preferred: 1.0 mL of plasma Minimum: 0.2 mL of plasma

Questions, please contact:

Julie Slater, Core Laboratory Manager (515) 241-6091
Sue Burt, Outreach Manager (515) 241-6820
Todd Sangel, Operations Manager (515) 241-5586

julie.slater@unitypoint.org
sue.burt@unitypoint.org
todd.sangel@unitypoint.org