



Technical Bulletin

Troponin T Generation 5 STAT assay

TO: Medical Staff and Clients

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DATE: July 21, 2020

SUBJECT: Troponin T Generation 5 (TnT Gen 5)

Effective: 08/03/2020

In joint collaboration with representatives from Emergency Department and Cardiology, DLS is pleased to announce the transition from Troponin T (TnT) to Troponin T Generation 5 STAT assay.

The change will apply to all DLS-associated hospitals and will standardize the Troponin T assays performed by major labs throughout the state.

There are 5 major differences between the current Troponin T (TnT) assay and the new Troponin T Generation 5 STAT assay (TnT Gen 5).

- 1) The new TnT Gen5 is reported in different units (ng/L vs ng/mL).
- 2) The new TnT Gen5 is more sensitive with values reported as low as 6 ng/L.
- 3) Troponin T delta values will be calculated if successive Troponin T testing performed within 6 hours.
- 4) Reference range will change from current <0.03 ng/mL to <19 ng/L.
- 5) New Troponin T critical range ≥ 52 ng/L.

Changes will be implemented to adjust the appropriate order sets in Carelink to reflect this change and all orders for Troponin T will be converted to the new TnT Gen 5 assay. A new “Suspected ACS Protocol”, attached, has been created to reflect the change to the Troponin T Gen 5 assay.

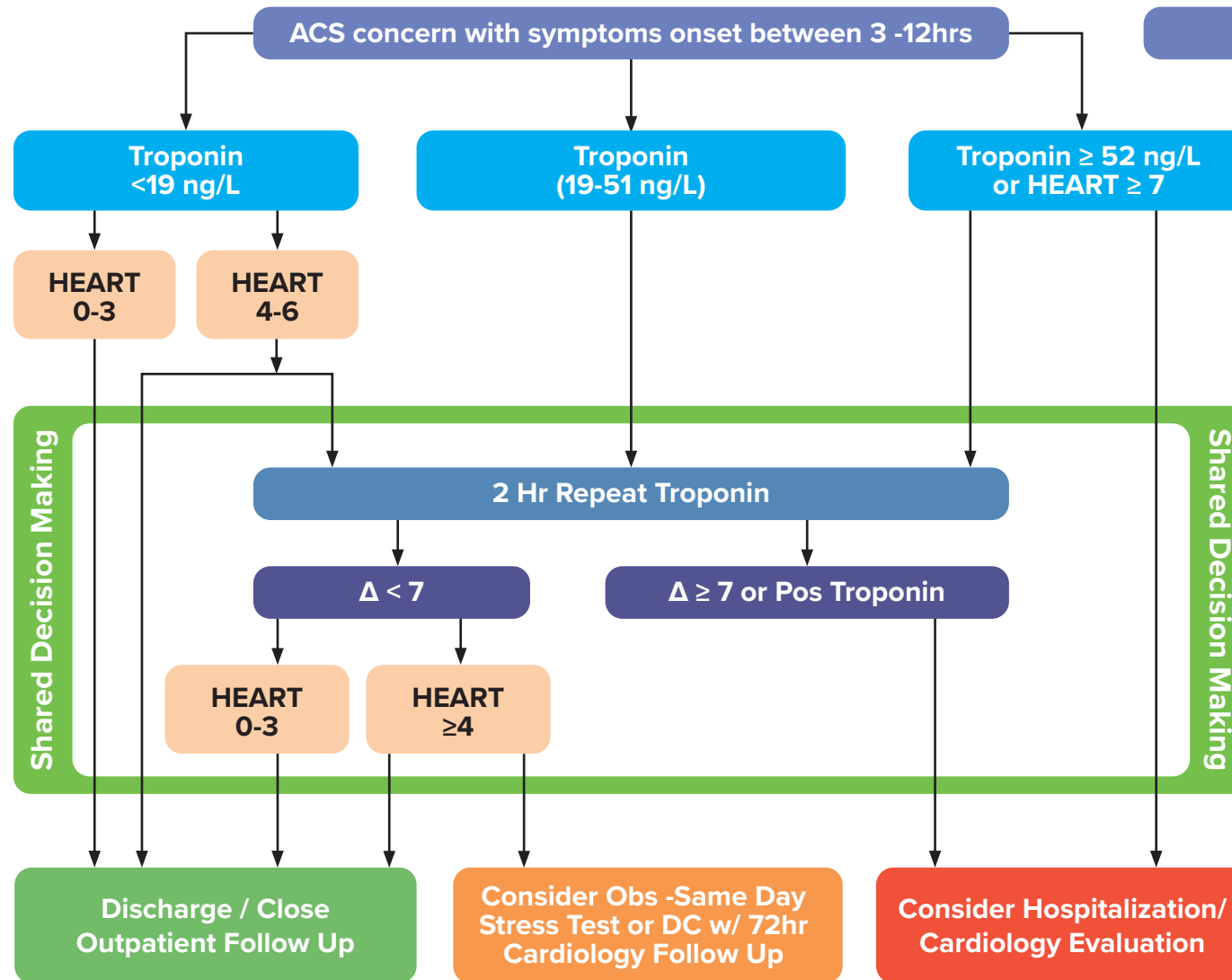
As with all laboratory testing, interpretation and management of a normal or elevated laboratory TnT Gen5 test result(s) should be performed in conjunction with the clinical history and presentation, physical examination, radiographic findings, and electrocardiogram(s).

Test Information:

TEST	ORDER CODE	Units	Reference Range	Critical
NEW* Troponin T Gen5	7632	ng/L	<19	>=52
NEW* Troponin T delta	7632	ng/L	(-7) - (+7)	
Current Troponin T	5785 will be converted to new Troponin T Gen 5	ng/mL	<0.03	None

Please refer any questions to Dr Wesley Kim at 589-5131, Dr Ana Ortega-Lopez at 691-4470, or DLS Client Services at 589-5101.

Suspected ACS Protocol



HEART Score		
History	<ul style="list-style-type: none"> Highly Moderate Slightly or Unlikely 	<ul style="list-style-type: none"> .2 .1 .0
ECG	<ul style="list-style-type: none"> Significant ST Depression Non-specific ST Changes Normal 	<ul style="list-style-type: none"> .-2 .1 .0
Age	<ul style="list-style-type: none"> 65 46 - 64 ≤ 45 	<ul style="list-style-type: none"> .2 .1 .0
Risk Factors	<ul style="list-style-type: none"> 3+ 1 - 2 None 	<ul style="list-style-type: none"> .2 .1 .0
Troponin	<ul style="list-style-type: none"> ≥ 3 x Normal Limit 1 - 3 x Normal Limit Normal 	<ul style="list-style-type: none"> .2 .1 .0

Risk Factors:
DM, Tobacco, HTN, HLD, FHc, CAD, Obesity

- Exclusions to ACS algorithm (use clinical decision making):**
- STEMI
 - ESRD Patients
 - Sepsis
 - Chest Trauma
 - Tachyarrhythmias (i.e. SVT, atrial fibrillation with RVR)
 - Neurologic disorders (i.e. stroke, SAD, etc)
 - Critically Ill patient (i.e. shock, respiratory failure, hemodynamic instability)
 - Active chest pain or other diagnosis more likely (i.e. Acute aortic syndrome, Pulmonary Embolism, myopericarditis, GI bleed, heart failure)
 - Rhabdomyolysis
 - Burn >25% of body surface area

EMERGENCY SERVICES



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** All cardiac testing is subject to site availability