

March 2021

To: Clients of the New York Hospital Laboratories (NYHL)

From: NYHL Management

Subject: **Transition to high-sensitivity troponin I assay**

Dear Valued NYHL Client,

Effective immediately, we will transition from the Siemens Ultra Contemporary cTnI assay to the Siemens Centaur high-sensitivity troponin I (hs-cTnI) assay. Serum sample is acceptable for the hs-cTnI assay whereas plasma sample is not accepted. **Please submit a gold top SST tube for this test.** For the new hs-cTnI assay (Troponin x1), results will be reported in whole numbers and in the unit of ng/L. Sex-specific 99th percentile upper reference level (URL) for male and female is 58 and 40 ng/L, respectively. Results greater than the 99th percentile URL will be flagged as “high”. Results greater than or equal to 200 ng/L will be flagged as “critical high”. The results of hs-cTnI assay are not directly comparable to values of the contemporary cTnI assay.

The hs-cTnI timed delta order set including hs-cTnI 0h, hs-cTnI 2hr and the delta change will also be orderable (Serial Troponin R/O MI). The hs-cTnI 2hr sample should be drawn between 1.5-3hr after the collection time of the hs-cTnI 0hr sample. A delta value greater than or equal to 20 will be flagged as “high”. If the second troponin sample is collected beyond 3 hours, an automated comment will be added to the Troponin 2hr result and the delta value.

High-sensitivity troponin testing is not intended as a screening tool. Detectable values will be seen in over 50% of healthy individuals, and the test is meant to be used in patients with suspicion for acute myocardial infarction (Type 1 or Type 2 NSTEMI). In addition to higher sensitivity for AMI, higher analytical precision allows for discernment of rapid changes over time compared to conventional assays. The recognition of troponin release identifies the presence of myocardial injury but not the mechanism, and may reflect a wide range of pathologies not related to AMI. To more accurately detect acute myocardial injury, a repeat troponin test at 2 hours is used to identify any dynamic change as outlined in the algorithm.

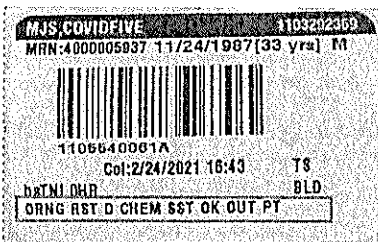
More information about Siemens ADVIA Centaur hs-cTnI assay can be found at:

https://cdn0.scrvl.com/39b415fb07de4d9656c7b516d8e2d907/1800000006781448/7dcea7abaa21/30-18-12862-01-76_ADVIA_Cntr_TNIH_Glb_SS_Fnl_1800000006781448.pdf

NYP test menu link (live after 2/22) <https://www.testmenu.com/nyphweillcornell/Tests/1090937>

NYP infonet link: https://infonet.nyp.org/Clinical/EpicDocs/Centaur_hs-cTnI_Algorithm.pdf

TEST	EPIC TEST CODE	CHANGE HEALTHCARE CODE
TROPONIN I, HIGH SENSITIVITY	LAB57682	713828101
TROPONIN I, HIGH SENSITIVITY 0 HOUR	LAB57681	713828109
TROPONIN I, HIGH SENSITIVITY 2 HOUR	LAB57683	713828117



Please direct any questions regarding these new testing approaches or test results to Dr. Zhen Zhao, Director of the Central Laboratory at 212-746-2682 email: zhz9010@med.cornell.edu, or Dr. Sarina Yang, Assistant Director of the Central Laboratory at 212-746-6292, email: hey9012@med.cornell.edu. As always, we appreciate your continued support of the New York Hospital Laboratories.