



**Memorandum Core #166**

To: UNC Health System Attending Physicians, Housestaff, Nursing Coordinators, Department Heads and Supervisors

From: *HCU* Herbert C. Whinna, MD, PhD  
Medical Director, McLendon Clinical Laboratories

Date: July 8, 2020

**SUBJECT: APTT and Heparin Changes Effective 9<sup>th</sup> of July, 2020**

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On 9-July-2020 starting at 8:30am the UNC Medical Center McLendon Clinical Laboratories Core Laboratory will implement reagent changes for aPTT screening (APTT [LAB325],) and the quantitative heparin (HEPARIN-UNFRACTIONATED [LAB317]; HEPARIN-LOW MOLECULAR WEIGHT [LAB316]) coagulation assays.

**aPTT Screening Assay**

The new aPTT Reference Range is below:

Assay	Current Range	New Range
aPTT	25.9-39.5	25.2 – 37.1

**Heparin Assay:**

We will be changing to a different Anti-Xa reagent from our current heparin assay. Of note with this new Anti-Xa reagent, there is NO addition of exogenous Antithrombin III, meaning it relies on the patient’s endogenous Antithrombin III levels. Therefore, if the patient is significantly Antithrombin III deficient, the reported heparin level could be lower than expected, although this assay may better reflect the level of heparin a patient is actually able to utilize.

Also, while this new reagent is calibrated specifically for measuring unfractionated and low molecular weight heparins, our validation data shows it can detect other Anti-Xa medications both direct and indirect. However, at this time, it is NOT cleared by the FDA for testing any medication other than the heparins. Accordingly, all Heparin results will be tagged with a comment stating:

“The assay used to measure Heparin is not specific for Heparin and will detect ANY Anti-Xa medications present. However, the assay is calibrated for Heparin and is designed to monitor heparinized patient with adequate levels of Antithrombin III”

The heparin sensitivity curve was rerun using the new heparin assay reagent and the new lot of aPTT reagent. The Heparin Correlation calculation has been updated to reflect those results.

Please contact Dr. Whinna ([Herbert.Whinna@unchealth.unc.edu](mailto:Herbert.Whinna@unchealth.unc.edu)/984-974-1500) for questions concerning the laboratory tests.