



## Memorandum

To: NMC and Community Providers

From: David Blin – Director, Laboratory Services  
Thomas Suppan, MD – Medical Director, Laboratory Services

Date: October 7, 2024

Re: **New Coagulation Analyzers – Updated Reference Ranges**

On October 16<sup>th</sup> the NMC Laboratory will transition coagulation testing to the ACL TOP 350 analyzers.

The new analyzers offer increased automation, improved reagent stability, better reagent management, the ability to load multiple assays simultaneously, closed-tube sampling, and pre-analysis detection of potential interfering factors (clotted tubes, hemolysis, ictericness, and lipemia).

Providers should be aware of important changes:

- Reference ranges for PT, aPTT, Fibrinogen, and D-Dimer assays have been updated
- D-dimer will be reported in Fibrinogen Equivalent Units (FEU)** instead of D-Dimer Units (DDU).  
*As a rough approximation, one FEU is roughly two DDU.*
- Refer to the chart below for additional information

Assay	Current Reference Range	New Reference Range	Comment
Prothrombin Time	9.5 to 11.2 seconds	<b>10.2 to 12.9 seconds</b>	
INR	2.0 to 3.0	2.0 to 3.0	<i>INR value valid only on patients on stabilized warfarin therapy. The recommended therapeutic range for warfarin (Coumadin) for most clinical indications is an INR of 2.0-3.0. An INR of 2.5-3.5 is recommended for patients with mechanical heart valves.</i>
aPTT	21.6 to 36.0 seconds	<b>25.1 to 36.5 seconds</b>	No longer including a comment related to the suggested therapeutic range for patient on Heparin
Fibrinogen	195 to 394 mg/dL <i>Critical Value &lt; 100 mg/dL Critical Value &gt; 600 mg/dL</i>	<b>200 to 395 mg/dL</b> <i>Critical Value &lt; 100 mg/dL *Critical value no longer defined for elevated results</i>	<i>*No critical value defined for elevated results</i>
Anti Xa	0.3 to 0.7 IU/mL	0.3 to 0.7 IU/mL	<i>DVT/PE: 0.3 - 0.7 IU/mL Acute Coronary Syndrome (ACS): 0.3 - 0.5 IU/mL</i>
D-Dimer	Less than 250 ng/mL DDU <i>Critical value ≥ 600 ng/mL DDU</i>	<b>Less than 500 ng/mL FEU**</b> <i>Critical value no longer defined for elevated results ***</i>	<b>** Ddimer is now reported in Fibrinogen Equivalent Units (FEU)</b>  <i>***Critical value no longer defined for elevated D-Dimer</i>  <i>The ACL TOP 350 CTS D-Dimer test is a Latex Enhanced Immunoassay which is FDA approved for use in conjunction with a Clinical Pretest Probability (PTP) Assessment model to exclude venous thromboembolism (VTE) in outpatients suspected of deep vein thrombosis (DVT) and pulmonary embolism (PE).</i>  <i>The cutoff value for this exclusion is 500 ng/mL FEU</i>

Ordering Information

- No Change for PT/INR, aPTT, Fibrinogen, and Anti-Xa
- Update for D-Dimer Testing

Live Date: October 16, 2024  
**Meditech Test Name** D-Dimer, PLSM Previous Meditech Name: DDimer COAG  
Lab Order Code: DDT  
CPT: 85379  
LOINC: 48065-7  
Sample: Blue Top Citrate Tube filled to the appropriate level

	<b>L-Code (Lab Code)</b>	<b>Test Name</b>	<b>CPT</b>	<b>LOINC Code</b>	<b>Units of Measure</b>
NEW ASSAY	DDT	D-DIMER, PLSM	85379	48065-7	ng/mL FEU
CURREN ASSAY	DIMERCOAG	D-DIMER COAG	85379	48058-2	ng/mL DDU

Please contact the Laboratory (802-524-1070) with any questions or concerns.