



## STANDARDIZED TESTING / OPERATING PROTOCOL REQUEST/ANNOUNCEMENT

## Annual 2018 Stago Lot Conversion

The laboratories will convert to the following lot numbers of PT, PTT, and Co STA-Neoplastin Cl Plus Lot 253023 Exp 11/30/2019 Description: STA-PTT Automate Lot 253196 Exp 12/31/2019 STA-Fibrinogen Lot 253102 Exp 11/30/2019 STA-Coag N&ABN Plus Lot 253184 Exp 12/31/2019		
Implementation Date:		
Performing Locations:	Click on the boxes that apply:	
	⊠Alamance Regional	
	⊠Med Center Mebane	
	⊠Moses Cone Hospital	
	⊠Med Center at High Point	
	⊠Wesley Long Hospital	
	⊠Women's Hospital	
	Click on the boxes that apply:	
	⊠Alamance Regional	
Affected Locations:	⊠Med Center Mebane	
	⊠Annie Penn Hospital	
	⊠Moses Cone Hospital	
	Med Center at High Point	
	⊠Wesley Long Hospital	
	⊠Women's Hospital	

	Click on the boxes that apply:	
Affected Departments:	□Blood Bank □Cytology □Flow Cytometry □Histology □Microbiology □Phlebotomy □Point of Care □Rapid Response Lab □Respiratory Therapy □Specimen Processing	
Specimen Type:	Sodium Citrate Plasma	
Updated Clinical Lab Procedures:		
Retired Clinical Lab Procedures:	N/A	
Notification to Client:	Click on the boxes that apply:  ⊠Section Not Applicable	

	⊠Memo Needed	
	Memo Needed	
Accreditation Section:	Click on the boxes that apply:  ⊠Section Not Applicable  □CAP Test menu change needed	
Laboratory IT section:	Click box and type needed changes/additions:  Section Not Applicable  □LIS changes □Reference range change/addition □Technical Failure change/addition □Critical Value change/add □Text comments needed □Specimen collection instructions □Need to monitor TAT □CPT code for tests(s)	

Technical Staff Update:	The Collection Modernoof	
STOP Initiator:	Kimberly Barr, MT (ASCP)	
Alamance Medical Director Signature	Quality Department will obtain signature:  Moreover 17/18	
Mebane Medical Director Signature	ma 9/17/18	
Greensboro/ Reidsville Medical Director Signature:	plu Paternel, W 8/17/18	



TO:

Cone Health Medical and Nursing Staff

FROM: Joshua Kish, MD, FCAP, FASCP

Chief of Pathology, Cone Health

John Patrick, MD, FCAP, FASCP

Greensboro and Reidsville Hospital Laboratories Medical Director, Cone Health

Mary Olney, MD, FCAP, Med center at Mebane Medical Director, Cone Health MCe > 4/17/18

Date: August 21, 2018

The Cone Health hospital laboratories conducted new coagulation reagent correlation studies and found no clinically significant differences between the two lot numbers. Reference ranges for the Greensboro/Reidsville and Alamance campuses are as seen below.

The laboratory will update the ISI of the new PT reagent (Lot 253196) to 1.28 on August 28, 2018 at 10:00am.

Assay	Range for all Cone Health laboratories	Units
Unfractionated Heparin	0.30-0.70	IU/mL
Low Molecular Weight Heparin	0.50-1.20	IU/mL
Prothombin Time (PT)	11.4-15.2	Seconds
Partial Thromboplastin Time (aPTT)	24 – 36	Seconds
Fibrinogen	210 – 475	mg/dL

The following assays are available to monitor anticoagulants:

Assay	Anticoagulant	
Prothombin Time (PT)	Warfarin (Coumadin)	
Activated Partial Thromboplastin Time (aPTT)	*Unfractionated Heparin, Direct Thrombin Inhibitors (Bivalirudin and Argatroban)	
Heparin Assay (Anti-Xa)	*Unfractionated Heparin	
Low Molecular Weight Heparin (Anti-Xa)	Enoxaparin, Dalteparin, Tinzaparin	

## Recommendations for monitoring anticoagulant therapy:

For an anticoagulant naïve patient a baseline PT and PTT should be performed before choosing anticoagulant therapies. If the baseline results are not within the normal range, it is recommended that a patient risk assessment be done before proceeding with therapy. Direct oral anticoagulants (apixaban, edoxaban, dabigatran or rivaroxaban) interfere with routine coagulation tests. Interpretation of lab results should be done with caution without knowing the time of when the patient's lost dose was taken.

\*Heparin levels are measured by an anti-Factor Xa assay and reported in IU/mL of activity. This is a direct measurement of the patient drug level and avoids the lack of specificity inherent in the aPTT assay. Studies indicate that monitoring of heparin therapy using anti-Xa levels, as opposed to the aPTT, can more quickly achieve patient therapeutic ranges and shorten hospital stays. If a patient heparin level is not in the expected range, and patient dosage has been confirmed, the Antithrombin III assay is available to assess possible heparin resistance.

Monitoring of the Factor Xa Inhibitors Fondaparinux, Rivaroxaban, Apixaban, and Edoxaban appear to be unnecessary for most patients. Assay techniques and target ranges for FXa Inhibitors have not been rigorously standardized and there is very little information relating anti-Xa levels to clinical outcomes. Currently, Cone Health laboratories do not perform specially-calibrated assays to monitor FXa Inhibitors.