#### TRAINING UPDATE

**Lab Location: Department:** 

SGAH & WAH Phlebotomy

 Date Distributed:
 3/13/2014

 Due Date:
 4/14/2014

 Implementation:
 4/15/2014

#### DESCRIPTION OF PROCEDURE REVISION

# Name of procedure:

# Activated Partial Thromboplastin Time (APTT) GEC / SGAH / WAH.G02 v3

# **Description of change(s):**

Major change is addition of instructions for preparing a collection tube when the patient's hematocrit is greater than 55 (appendices A&B). Techs are responsible to prepare the collection tube and inform phleb of volume of blood to be collected.

Phlebotomists are responsible to collect the specimen as described. Only section 3 and Appendix B are attached – this is all that applies to phlebotomy staff

Section	Reason	
3.1	Add reference to Appendices	
3.2	Update tube volumes, add opened container storage	
19	Add Appendix A: Instructions for Preparing Collection Tube for Hematocrit >55%,	
	and B: Phlebotomist Instructions for Blood Collection	

This revised SOP will be implemented on April 15, 2014

Document your compliance with this training update by taking the quiz in the MTS system.

Quest Diagnostics Nichols Institute Site: GEC, SGAH & WAH

# Approved draft for training all sites (version 3)

## **Technical SOP**

Title	Activated Partial Thrombople	astin Time (AP	<b>ГТ</b> )
Prepared by	Ashkan Chini	Date:	3/10/2011
Owner	Robert SanLuis	Date:	3/10/2011

Laboratory Approval	Local Effective Date:		
Print Name and Title Refer to the electronic signature	Signature	Date	
page for approval and approval dates.			

Review				
Print Name	Signature	Date		

Quest Diagnostics Nichols Institute Site: GEC, SGAH & WAH

#### 2. ANALYTICAL PRINCIPLE

STA® PTT A 5 involves the recalcification time of plasma in the presence of a standardized amount of platelet substitute and a specific activator. This procedure minimizes test variables by standardizing the contact activation and optimizes the concentration of platelet-like phospholipids. The time of clot formation is measured on the STA Compact. The STA Compact is a fully automated coagulation instrument, which uses an electromagnetic mechanical clot detection system. The STA Compact monitors the oscillation of a steel ball within the cuvette with the reagents and plasma. When the oscillation of the steel ball is stopped by clot formation, the sensor registers the time.

# 3. SPECIMEN REQUIREMENTS

3.1 Patient Preparation

Component	Special Notations	
Fasting/Special Diets	N/A	
Specimen Collection and/or Timing	Normal procedures for collecting plasma may be used for samples to be analyzed by this method.  Vacutainer tube must be filled to the line to ensure the proper ratio of blood to anticoagulant.	
Special Collection Procedures	If hematocrit >55%, refer to appendices A and B for collection instructions.	
Other	N/A	

3.2 Specimen Type & Handling

Criteria			
Type -Preferred	Whole Blood (sodium citrate)		
-Other Acceptable	None		
<b>Collection Container</b>	Light blue top tube (3.2% sodium citrate)		
	Citrated blood 9:1 (blood to anticoagulant)		
Volume - Optimum	2.7 mL (9:1 blood to anticoagulant) in a 2.7 ml tube		
- Minimum	2.4 mL (9:1 blood to anticoagulant) in a 2.7 ml tube		
- Optimum	1.8 mL (9:1 blood to anticoagulant) in a 1.8 mL tube		
- Minimum	1.8 mL (9:1 blood to anticoagulant) in a 1.8 mL tube		
Transport Container and Light blue vacuta		(as above) or a clean plastic screw	
Temperature	capped vial at room temperature.		
Stability & Storage	Room Temperature:	4 hours (opened, vacuum broken)	
Requirements	$(20 \pm 5^{\circ} \text{ C})$	24 hours (unopened, vacuum intact)	
		2 hours (if on heparin therapy)	
	Refrigerated:	Not recommended	
	Frozen plasma:	1 month	
Specimen preparation	Centrifuge whole blood for specified time /speed		
	documented on each centrifuge for preparing platelet-poor		
	plasma.		
<b>Unacceptable Specimens</b>	Specimens that are unlabeled, improperly labeled, or those		

SOP ID: GEC / SGAH / WAH.G02

## Appendix B

#### **Phlebotomist Instructions for Blood Collection**

The technologist will prepare a special tube in which the anticoagulant has been adjusted, therefore the tube is not vacuumed. The technologist will inform the phlebotomist of the exact amount of blood needed to fill the tube.

### **Equipment and Supplies**

Latex gloves
Latex free tourniquet
Latex free Band Aid or Tape
Alcohol Prep (70% alcohol)
2x2 sterile gauze
Collection tube
Blood Collection Set 21 or 23 gauge winged set
Blood Transfer Device
3mL syringe
Biohazard bag
Biohazard sharps container
LIS collection list and label/Lab requisition

## **Collection Steps**

- 1. Introduce yourself to the patient by stating your first and last name.
- 2. Positively identify the patient according to the SOP 'Patient Identification', Phlebotomy procedure manual.
- 3. Wash hands. Apply gloves.
- 4. Explain the procedure to the patient and obtain patient's consent to draw blood.
- 5. Collect equipment and correct technologist-provided collection tube.
- 6. Assemble equipment and break needle and syringe seals in the presence of the patient.
- 7. Apply tourniquet about midway between the elbow and the shoulder 3-4 inches above the venipuncture site). Place patient's arm in a downward position to prevent reflux of 'backflow' of blood from the tube into the venous system. Ask the patient to close hand gently.
- 8. Palpate/feel for vein locating a vein that will flow fast (reducing the possibility of the blood clotting).
- 9. Clean the area for venipuncture with a 70% alcohol pad decontaminating the collection site.
- 10. Allow the area to air-dry completely.
- 11. Assemble the 21 or 23 gauge winged set to the 3mL syringe. Pull back the plunger to dispel all the air out of the syringe.
- 12. With the bevel up, align the needle with the vein while holding the skin taut. Insert the needle at a 15-30 degree angle with the skin. Remove your hand from drawing the skin taut. Grasp the syringe and draw back bringing the plunger tip to the exact amount of blood requested by the technologist.
- 13. Release the tourniquet. Ask the patient to open hand.

Quest Diagnostics Nichols Institute Site: GEC, SGAH & WAH

- 14. Place gauze above the puncture site and remove the needle while simultaneously applying pressure on the puncture sit. Firmly activate needle safety shield, a click must be heard to ensure that the safety shield is secure.
- 15. Remove 21 or 23 gauge winged set from syringe.
- 16. Attach the blood-filled syringe to the Blood Transfer Device.
- 17. Connect the Blood Transfer Device to the un-vacuumed tube, provided by the technologist, and slow and gently fill the collection tube. DO NOT FORCE blood into tube. Pressure can lead to tube explosion and blood exposure.
- 18. Place the cap on the tube and invert a few times to make sure the anticoagulant is mixed with blood.
- 19. Dispose of all blood collection equipment into the nearest sharps container. DO NOT disassemble the syringe from the Blood Transfer Device.
- 20. Dispose of all other used materials in appropriate container and wash hands.
- 21. Label the sample with the LIS collection label and write the time, date, and your tech code.
- 22. Transport specimen to the Lab.