### TRAINING UPDATE

Lab Location: Department: SGMC Core & Processing 
 Date Distributed:
 7/1/2015

 Due Date:
 7/29/2015

 Implementation:
 7/29/2015

#### **DESCRIPTION OF REVISION**

Name of procedure:

## Autotransfusion (Perfusion) QC Testing SGAH.S31 v4

**Description of change(s):** 

Section 3: Add Core LabSection 4: Add autotransfusion and perfusionistSection 5: Add item E for testing and resulting

This revised SOP will be implemented on July 29, 2015.

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

# Approved draft for training (version 4)

Non-Technical SOP		
Title	Autotransfusion (Perfusion) QC Testing	
Prepared by	Marie Sabonis	Date: 1/26/2010
Owner	Samson Khandagale	Date: 1/26/2010

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

Review:					
Print Name	Signature	Date			

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#### 1. PURPOSE

This procedure describes the process to place laboratory orders and enter results for QC testing for autotransfusion procedures.

#### 2. SCOPE

This procedure applies to QC testing for autotransfusion procedures.

#### 3. **RESPONSIBILITY**

This procedure is performed by Specimen Processing and Core Lab staff.

#### 4. **DEFINITIONS**

- A. Autotransfusion Transfusion of a patient's own blood; in this case, the blood is collected and reinfused during surgery.
- B. Perfusionist The medical professional responsible for extracorporeal oxygenation of the blood during open heart surgery
- C. GUI Graphical User Interface

### 5. **PROCEDURE**

### A. General Information

1. The laboratory performs quarterly QC testing of perioperative services including blood recovery and autologous platelet gel. According to AABB Standards, blood recovery is best measured by markers of red blood cell concentration and wash efficiency. The selected parameters are hematocrit and serum potassium levels pre and post-processing. Autologous platelet gel is best measured by an increase in platelet count and white cell count and a reduction of hematocrit pre and post-processing.

- 2. There are five instruments utilized by the perfusionists at Shady Grove Adventist Hospital. They consist of two (2) Cell Saver 5P and three (3) SmartPrep 2 instruments.
- 3. Lab orders are entered into the LIS via an outside location medical record number that is associated with each instrument. The chart below specifies the medical record number for each instrument:

Instrument	Serial Number	Medical Record #
Cell Saver 5P	05L056	BIOT-2
Cell Saver 5P	05L052	BIOT-5
SmartPrep 2	SMP2-2126	BIOT-1
SmartPrep 2	SMP2-3139	BIOT-3
SmartPrep 2	SMP2-3876	BIOT-4

- 4. The perfusionist will submit specimens for testing with a specific requisition (see Related Documents).
- 5. For each Cell Saver, 1-2 samples (pre and post process) will be collected and sent for testing. Tests to be performed include Hematocrit and Potassium.
- 6. For each platelet gel, they will collect and send a pre and post aliquot of blood for testing. Tests to be performed include Platelet Count, Hematocrit and WBC count.
- 7. Once results are entered into the LIS, the report will automatically be faxed to 240-826-5868 via Sunquest fax printer.

### **B.** Order in LIS using function REI

1. From the requisition determine the medical record number to place orders into the LIS. This is noted in the first box that states "Check the applicable Analyzer". The medical record number is denoted in square brackets after the serial number of the analyzer. In the example below, BIOT-2 is the medical record number.

### *Example:* Cell Saver 5P serial number 05L056 [BIOT-2]

**Note**: If "Other:" section of requisition is completed, then a new BIOT- medical record number must be created. Refer to section C below.

2. Enter orders in the LIS using the medical record number via function REI or GUI Order Entry. LIS test code is noted at the end of test name on the requisition.

*Example*: Pre HCT (PHCT) - **PHCT** is the LIS test code.

- 3. Use tech code **905** (Biotronics,QC) as the "collected by".
- 4. Label specimen with LIS accession label.

Form revised 3/31/00

- 5. If test is for either a pre or post K (Potassium), centrifuge specimen and deliver to Chemistry. All other specimens are delivered to Hematology and placed on rocker.
- 6. File the manual requisition in the Procirca (Biotronics) file folder.

## C. Create a new BIOT- Medical Record Number in function REI

- 1. Function: **REI** BATCH HOSPITAL ID <SGAH>: Type / (back slash) and press **Enter**.
- 2. At the 'Lookup Mode: Name:' prompt, use the up arrow key to change the look up mode from NAME to Hospital number (**H**). Press **Enter**.
- 3. System displays -Lookup Mode: HOSP. NO: type in **BIOT-** press **Enter**.
- 4. System displays -

	Select Patient					
Name	Hosp. No.	HID	Dob	Sx	Sts	Site
New Patient						
Quit						

Highlight **New patient** and press **Enter**.

- 5. At the prompt Hospital ID: Type **SGAH** and press **Enter**.
- 6. System will prompt for patient demographics.
  - Patient name: Use last name, first name format. Last name is name of the instrument and first name is the serial number. This information will be found in the "other" box on the requisition.
  - Date of birth: press **Enter**, system will default in 01/01/01
  - Sex: press **Enter**, system will default in M
  - AKA Name: press **Enter**, no default
  - SSN: press **Enter**, no default
- 7. Summary screen displays. Select A to accept, or M to Modify, or R to Reject as appropriate.
- 8. A screen similar to the following will display –

INTERFACE REQUISITION ENTRY	Hosp. ID: SGAH

HOSP. NO.: BIOT-x SMARTPREP2,2L34555 9Y M BIOT

## REQ NO.:

PRE-REGISTERED PATIENT, NO EVENTS Create New Episode Display all Inactive Events

#### Select Create New Episode and press Enter.

- 9. Press Enter at the account number prompt. Accept the default of 9999999.
- 10. Press Enter for each of the following prompts -
  - Event type,
  - Event status,
  - Start/Admit Date:
  - Physician 1,
  - Diagnosis and comment.
- 11. Review the entries, select A to accept, M to Modify or R to Reject as appropriate.
- 12. "A new episode has been created" displays. The 'patient' has been created in the LIS.
- 13. Proceed with the remaining prompts in section B.2-6 to enter orders and process the specimen.

#### **D.** Order in LIS using GUI

Refer to addendum for process to enter LIS orders in the GUI version of the LIS.

### E. Testing and Resulting

- 1. Samples are acceptable even if grossly hemolyzed.
- 2. Manually program the instrument to run the ordered test(s)
- 3. Print the result from the Vista and LH750.
- 4. Enter the results manually into the LIS.

## 6. **RELATED DOCUMENTS**

Procirca Requisition (AG.F199)

## 7. **REFERENCES**

N/A

## 8. **REVISION HISTORY**

Version	Date	Reason for Revision	Revised By	Approved By
000	6/18/2012	Sections 1,2,5 & 9: Update company name from	L. Barrett	S.
		Biotronics to Procirca		Khandagale
001	9/20/2012	Section 5: Add new cell saver BIOT-5	L. Barrett	S.
				Khandagale
002	12/1/2014	Title, Section 1 & 2: remove company name and	L. Barrett	<b>S</b> .
		replace with Autotransfusion or perfusionist	S.	Khandagale
		Section 4: add GUI	Khandagale	
		Section 5: add item D		
		Section 6: moved form from section 9		
		Section 9: add SQ 7.1 ordering process		
		Footer: version # leading zero's dropped due to		
		new EDCS in use as of 10/7/13.		
3	6/9/2015	Section 3: add Core Lab	L. Barrett	S.
		Section 4: add autotransfusion and perfusionist		Khandagale
		Section 5: add item E		R SanLuis

## 9. ADDENDA AND APPENDICES

Entering Orders using Sunquest 7.1 LIS System

## **Entering Orders using Sunquest 7.1 LIS System**

¥ Order Entry	1									
Order options	Orders	Mod	e MODE1	~						
Lookup by	Patient ID	Valu	e BIOT-1		Search					
			By Defau	It HID Only	T					
Patients	Standing orders				J					
To fill the list	, enter a lookup value	and click the S	earch button.							
Name	Patient ID	HID 9	SSN	Date of Birth	Sex	Status	INS ID#	AKA Name	User Defined Fields	

 From the requisition determine the medical record number to place orders into the LIS. This is noted in the first box that states "Check the applicable Analyzer". The medical record number is denoted in square brackets after the serial number of the analyzer. Enter the correct Medical Record number and press **Search** as show above.

2. A screen similar to the one below will appear.

dor Entr											
der Entry											
			Mada upper								
er options	orders	<b>×</b>	MODE1	Y							
cup by	Patient ID	~	Value BIOT-1	G	Search						
			By De	efault HID Only							
ients	Standing orders										
and for a	d t antient metables	"Dations II									
ame	Patient ID	HID	SSN	Date of Birth	ı Sex	Status	INS ID#	AKA Name	User Defined F	ields	
IARTPREF	P BIOT-1	SGAH		01/01/2001	M	ACT					
<u>n</u> t Sele	ection										 
ent Sele	sction	SMARTPRE									
n <b>t Sele</b> rch found tus	sction I 1 active event for " Start Date D	SMARTPRE	:P2,SMP22126 Date Billir	 Ig Account #	Loc/Type	Physician 1	Ph	ysician 2			
ent Sele rch found atus	ction 1 active event for " Start Date D 07/17/2012	SMARTPRE	:P2,5MP22126 Date Billir	" <b>19 Account #</b> 999999	Loc/Type 9 BIOT/OS	Physician 1 09153 BIOTRO	Ph	ysician 2			
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3. Click on **Select** to proceed.

Order Entry	ويستجاهدوها وسوي يستجاه ومرد				
BIOT-1 SMARTPR Date of birth 01/01/2001 (1: Hospital ID SGAH Att Phys 1 O9153 BIOTRC Att Phys 2	EP2,SMP2 3Y) Sex M DNIC,QC	Rule Messages Order Codes Order <u>e</u> ntry	chedyle Ordens		
Patient Select General information		Order Code	Order Description	Modifier	DX Code
Collect date 10/2 Collect time Receive date Receive time	21/2014				
Order physician O91 Copy to phys 1 Copy to phys 2 Copy to phys 3	153 ~ BIOTRON				
Order comment Order account # 999 Phlebotomist code Workload code	999				
Order location BIO Community Med Rec	T ~ BIOTRONI				

- 4. Verify that the Medical Record number and Analyzer type on the top of the screen match the requisition.
- 5. Under General Information (left side) fill in the appropriate information in the highlighted boxes from the requisition.
  - Date defaults to the current Collect date. Verify that the specimen is from the current date.
  - Press the Tab key to go to the next box and insert correct Collect time.
  - Press Tab key to go to the Order Code box

#### Order Entry

Date of birth 01/01/20 Hospital ID SGAH	01(13Y) Sex M			
Att Phys 1 09153 BI	OTRONIC.OC			
Att Phys 2		Order Codes	Schedule Orders	
ALL PHYS 2		Order entry		
Patient Select		Order Code	Order Description	Modifier
General information				
Collect date	10/21/2014			
Collect time	11:00			
Receive date	10/21/2014			
Receive time	19:01			
Order physician	09153 ~ BIOTRON			
Copy to phys 1				
Copy to phys 2				
Copy to phys 3				
Order comment				
Order account #	999999			
Phlebotomist code	905 ~ BIOTRONIC			
Workload code				
Order location	BIOT ~ BIOTRONI			
Community Mad Days				

- 6. Receive date and time will automatically populate the next boxes after you press the Tab key.
- 7. Verify the Order physician box defaults to O9513, Biotronics. If default does not appear, insert O9513 in the box to bring up the Ordering Physician.

- 8. Press Tab key up to Order account #box and verify the account number defaults to 999999. If it did not default, insert 999999 in the yellow box.
- 9. Press Tab key and go to Phlebotomist code box. Type 905 as the phlebotomist code.
- 10. Press Tab key and leave the workload box vacant.
- 11. Press Tab key to Order location and confirm that BIOT (Biotronics) is populated, if not insert BIOT in the box.
- 12. Press Tab key to move to the Order Code prompt.

💕 Order Entry					
BIOT-1 SMARTPREP2,SMP2 Date of birth 01/01/2001 (13Y) Sex M Hospital ID SGAH Att Phys 1 09153 BIOTRONIC,QC Att Phys 2	Rule Messages				
	Order Codes         Schedule Orders           Order entry				
Destinat Select           General information           Collect date         10/21/2014           Collect time         11:00           Receive date         10/21/2014           Receive date         10/21/2014           Order physician         09153 ~ BIOTRON           Copy to phys 1         Copy to phys 3           Order comment         999999           Phlebtomist code         905 ~ BIOTRONIC           Workload code         Dorder costion           Order costion         BIOT ~ BIOTRONI	Order Code PHCT	Order Description Pre HCT	Modifier		DX Code
	Accession assignm	ent ecimen Comment		Acc # HIS Order #	Order Code

13. Enter the correct test code listed on the requisition and press the Tab key.

💕 Order Entry				- * ×
BIOT-1 SMARTPREP2,SMP2	Rule Mescages			
Date of birth 01/01/2001 (13Y) Sex M				
Hospital ID SGAH				
Att Phys 1 09153 BIOTRONIC.QC	Concernant of			
Att Phys 2	Grder Codes	THE PLAN AND A DESCRIPTION OF THE PLAN AND AND AND AND AND AND AND A DESCRIPTION OF THE PLAN AND AND AND AND AND AND AND AND AND A		
	Order entry	Pre HCT		
Patient Select	Order Code	Order Description	Modifier	DX Code
General information /Order Modification	PHCT	Pre HCT		
Contraction (Contraction				
Collect date 10/21/2014				
Receive date 10/21/2014				
Receive time 19:01				
Order physician 09153 ~ BIOTRON				
Copy to phys 1				
Copy to phys 2				
Copy to phys 3				
Order comment				
Order account # 999999				
Phlebotomist code 905 ~ BIOTRONIC				
Workload code				
Order location BIOT ~ BIOTRONI				
Community Med Rec				
	-			
	Accession assignmen	NE .		
	Dept Spec	imen Comment	Acc	# HIS Orde Order Code
	GenLab		T391	63 PHCT
			7	
			· · ·	
			Rev	iew (Assign Aco) (Assign HIS) (Reassign Acc(2))
			Eave Clear CReprint Labels Retr	ansmit ResultsExitEelp

14. Accession number is displayed. Click on the **Save** key