

TRAINING UPDATE

Lab Location: SGAH
Department: Blood Bank

Date Implemented: 5.16.2013
Due Date: 5.20.2013

DESCRIPTION OF PROCEDURE REVISION

Name of procedure:
Plasma Aliquot Preparation
Description of change(s):
<ul style="list-style-type: none">• Updated SOP to include ISBT-128 instructions.• Added summary of process above procedure in SOP.• Blood component prep code for all aliquoted products will be "A" plus the E code. For example, if you aliquot product E2284, your BCP code will be AE2284.• We must print new blood product labels for aliquotted products using the HemaTrax system (training in progress).• Sunquest v6.3 CANNOT recognize the division letter for an aliquotted ISBT-128 product, so we will print the slash number label from Sunquest and apply it to the ISBT label for all aliquotted products.• Note: If you aliquot an apheresis plasma product, you will have to calculate the volume of anticoagulant in the plasma. Always try to only use plasma from whole blood for aliquot.

Non-Technical SOP

Title	Plasma Aliquot Preparation	
Prepared by	Stephanie Codina	Date: 12.21.2012
Owner	Stephanie Codina	Date: 12.21.2012

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

Review:		
Print Name	Signature	Date

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1. PURPOSE

To describe the procedure for making small-volume plasma aliquots from plasma units. This procedure allows small amounts of a plasma unit to be transfused over the lifespan of the original blood product. This process limits donor exposures and decreases donor-related risks in the recipient while minimizing overall blood product wastage.

2. SCOPE

This procedure applies to plasma transfusion requested for a neonate or small child. SGAH staff members perform all plasma aliquot procedures for WAH and SGAH.

3. RESPONSIBILITY

All blood bank staff members must be trained and competent in plasma aliquot preparation to ensure the purity, potency, and safety of the aliquotted plasma product.

4. DEFINITIONS

N/A

5. PROCEDURE

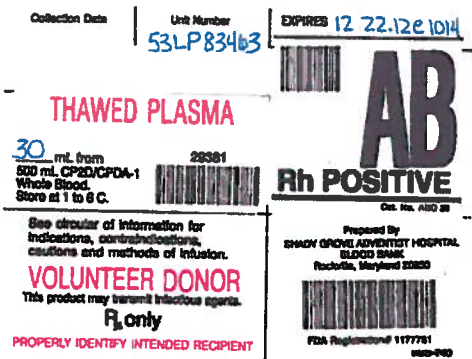

Summary of steps that will be performed for this procedure:

- A. Thaw and relabel the plasma unit per procedure.
- B. Physically prepare the aliquot unit.
- C. BCP the aliquot in the LIS to generate a slash unit.
- D. Generate a HemaTrax label for the new product using the aliquot division letter.
- E. Label the unit with both the HemaTrax label and slash unit number (only the slash number will correspond to the Sunquest system).
- F. Allocate and issue the aliquot using the slash unit number.

Step	Action
1	Select plasma that meets the recipient's transfusion specifications. <ul style="list-style-type: none"> A. Only group AB plasma is transfused to neonates. <ul style="list-style-type: none"> a. If group AB plasma is not available, obtain pathologist approval to transfuse group specific plasma to a neonate. b. We must have 2 independent blood types on file (ABO retype) prior to transfusing group-specific plasma. B. Pediatric patients may receive group AB or group specific plasma products. C. All plasma transfused to neonates will be transfused within 24 hours of the time thawed. If a previously-thawed unit is used, ensure that the transfusion will take place before the 24-hour limit.
2	If the plasma is frozen, thaw per procedure "Plasma for Transfusion." Thaw the plasma physically and in the computer.
3	Obtain the supplies necessary to aliquot the plasma. <ul style="list-style-type: none"> A. 150 mL transfer bag B. Sterile welding device C. Heat sealer D. Scale E. Hemostats F. Labels <p>Use aseptic technique for this procedure!</p>
4	Document the following on the "Product Modification Log." <ul style="list-style-type: none"> A. Tech identification B. Date of modification C. Unit number of original unit D. Product code of original unit E. Lot number of bag F. Wafer lot number
5	Gently mix the primary bag to ensure the plasma is completely thawed and no frozen bits remain.
6	Connect the transfer bag to the primary plasma per procedure, "Sterile Tubing Welder."
7	Prepare the scale for use. Refer to procedure, "Scale Quality Control." Tare the scale using an empty 150 mL transfer bag.
8	Allow the required amount of plasma to flow into the transfer bag via gravity. Include an extra 5 mL of plasma to compensate for the volume that will be lost in the tubing.

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Step	Action
9	Clamp the line when an appropriate volume of plasma has been transferred by placing a hemostat between the seal location and the port of EACH bag. Seal the line between the hemostat clamps using a tube sealer at least twice. <ul style="list-style-type: none"> A. Always make sure the hemostat is clamped between the parent unit and the location in which the tubing will be sealed. B. This will protect the sterility of the unit should the heat seal fail.
10	Calculate the volume of plasma remaining in the parent product (original bag) using the following formula: Original volume – aliquotted volume = new volume
11	Change the volume of the parent product. <ul style="list-style-type: none"> A. Place a single line through the original volume. B. Write the new volume on the label. C. Initial the change.
12	When the aliquot was made from an apheresis plasma product, calculate the amount of anticoagulant in the aliquoted and parent plasma products using the formulas: $\text{Ratio} = \frac{\text{Amount of Anticoagulant in Plasma}}{\text{Volume of Plasma}}$ $\text{Volume of anticoagulant in the aliquot} = \text{ratio} \times \text{aliquot volume}$ $\text{Volume of anticoagulant in the parent product} = \text{ratio} \times \text{remaining volume}$ <p>For example,</p> <p>If the plasma label indicated an anticoagulant volume of 5 mL and a total volume of 200 mL. Therefore, the ratio would be:</p> $\text{Ratio} = 5 \text{ mL} \div 200 \text{ mL} = 0.025$ <p>Assume the new aliquot is 15 mL. The amount of anticoagulant in the aliquot is:</p> $0.025 \times 15 \text{ mL} = 0.4 \text{ mL of anticoagulant in the aliquot.}$

Step	Action
13	<p>Prepare a label for the plasma aliquot. The label MUST contain all of the following</p> <ul style="list-style-type: none"> A. For ISBT-128 labeled units, print a label via the HemaTrax system per procedure, "ISBT-128 Label Production." Include the division letter on the label. B. For codabar labeled units, prepare a label with the following: <ul style="list-style-type: none"> a. Unit number (handwritten) b. Expiration date and time (24 hours from the time the unit was thawed) c. Thawed plasma product code barcode label (document the volume of the aliquot on the label) d. Blood type (ABO/Rh) e. FDA registration (Prepared by SGAH Blood Bank) <p>Apply the label to the aliquot prior to disconnecting it from the parent unit.</p> 
14	<p>Document the following on the "Product Modification Log."</p> <ul style="list-style-type: none"> A. Unit number of new product B. Post-product E code of new product C. Documentation of the weld inspection
15	<p>Create the aliquot in the LIS system per appendix A.</p> <ul style="list-style-type: none"> A. A new unit number label will print following LIS modification. B. Apply the unit number to the new product label for codabar or ISBT-128 labeled units. 

Step	Action
16	<p>Have a second tech verify the following labeling elements are correct on the aliquot blood product label and document the 2nd label check on the "Product Modification Log" form. The following will be verified. Do not issue the product if discrepancies exist.</p> <ul style="list-style-type: none"> A. Unit number or DIN B. Divided unit slash number (53FC##### / #) or division letter C. ABO/Rh D. Intended use (volunteer donor vs. directed donor) E. Donation type (volunteer donor vs. directed donor) F. E product code and description G. Expiration date and time H. Special testing (if applicable) I. Facility information J. Volume of aliquot K. Volume of anticoagulant in the aliquot (apheresis only) <p>In addition, the second tech must verify</p> <ul style="list-style-type: none"> A. Adjusted volume of parent product B. Adjusted anticoagulant of parent unit (apheresis units only).
17	<p>Store the aliquot in the refrigerator (1-6°C) until issue. Aliquots should be transfused as soon as possible following preparation.</p>

6. **RELATED DOCUMENTS**
 SOP: Plasma for Transfusion
 SOP: Sterile Tubing Welder
 SOP: Scale Quality Control
 SOP: ISBT-128 Label Production
 Form: Product Modification Log

7. **REFERENCES**
 None

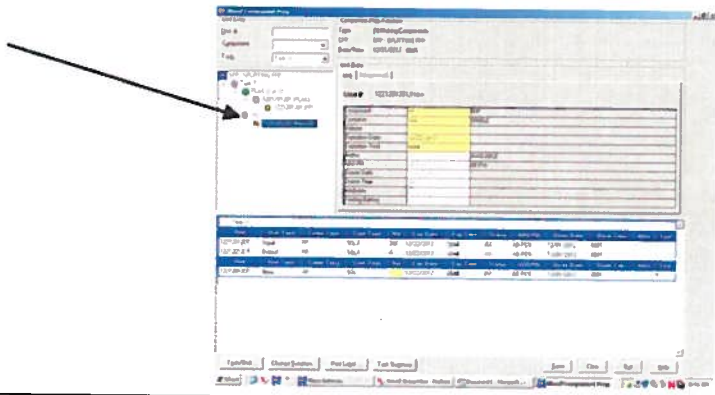
8. **REVISION HISTORY**

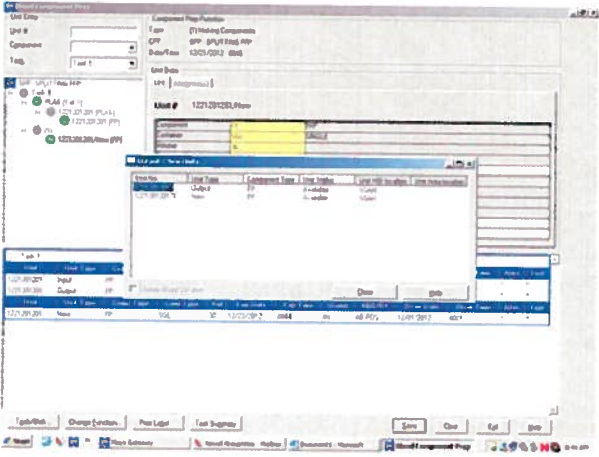
Version	Date	Reason for Revision	Revised By	Approved By
		Supersedes SGAH.B408.01		
000	5.9.13	Section 5: Added ISBT-128 labeling information Section 9: Added appendix B	SCodina	NCacciabeve

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- 9. ADDENDA AND APPENDICES**
- A. Preparing a Plasma Aliquot in Sunquest
 - B. ISBT-128 Product Codes

Appendix A Preparing a Plasma Aliquot in Sunquest

Step	
1	Access Sunquest function, "Blood Component Preparation."
2	In the "Lookup by" prompt, select "Component Prep Function" from the dropdown menu.
3	At the "Value" prompt, type the correct blood component preparation function and press the "Tab" key. Refer to appendix B for guidance.
4	Press the "Tab" key at the date and time prompts to default the current date and time or manually enter a date and time.
5	Click the "Continue" button.
6	Enter the unit number and press the "Tab" key.
7	Select the thawed plasma product from the dropdown list if the component does not autofill.
8	Press the "Tab" key to open the task tree.
9	Click on the yellow "N" in the task tree. The screen will display the aliquot data. <div style="text-align: center; margin-top: 10px;">  </div>
10	Enter the volume of the prepared aliquot and press the "Tab" key. The yellow letters in the task tree will turn green and the volume of the parent unit will change based on the volume of the aliquot.

Step	
11	<p>Verify the accuracy of the expiration date and time assigned by the LIS.</p> <ul style="list-style-type: none"> A. If a sterile connecting device was used, the expiration date of the original (parent) blood product will not change. B. If an open system was used, the new expiration date and time of the original (parent) unit will be 4 hours from the time of modification. Click on the yellow "O" and modify the expiration date/time of the original blood product. Note: If an open system is used, the E codes in appendix B do not apply. See a supervisor for guidance. C. The expiration date and time of the aliquotted blood product will be 24 hours from the time the original unit was thawed, regardless of whether an open or closed system was used to prepare the aliquot.
12	Click on the "Save" button.
13	The pop-up message, "File all units?" appears. Click the "OK" button.
14	<p>An "Output/New Units" screen will appear. Review the information for correctness and click the "Close" button. Ensure the slash number of the new aliquot is correct.</p>  <p>The screenshot shows a software interface for blood product management. A main window titled 'Component Page/History' displays a table with columns for Unit #, Component, Exp, and Date. A pop-up dialog box titled 'File all units?' is open, asking for confirmation to file all units. The dialog has 'OK' and 'Cancel' buttons. The background window shows a list of units with a yellow highlight on one row.</p>
15	A new unit number label will generate. Apply the printed label to the label for the new unit over the handwritten unit number that was previously documented on the plasma aliquot label for codabar-labeled units.

Appendix B
ISBT-128 Product Codes

Original Product	Component Prep Function	Final Product
E2284	AE2284	E2284
E2701	AE2701	E2701
E2719	AE2719	E2719
E2737	AE2737	E2737
Codabar label	SFP	Codabar 29381