University of Washington Medical Center 1959 NE Pacific Street. Seattle, WA 98195 Transfusion Services Laboratory Policies and Procedures Manual	Original Effective Date: 03-11-16 Revision Effective Date:	Number: PC-0003.02
TITLE: **Dividing Blood Components**		

PURPOSE:
To provide instructions for preparing blood splits using syringes or small bags with or without the sterile connecting device (SCD)

PRINCIPLE & CLINICAL SIGNIFICANCE:
NA

POLICIES:
- Product prepared by the TSL using a filter-syringe do not require further filtration at administration
- RBC's and FFP prepared in a syringe expire within 24 hours or the same time as the parent bag expiration, whichever is shorter
- Platelets and cryoprecipitate prepared in a syringe expire within 4 hours or the same time as the parent bag expiration, whichever is shorter
- Sterile connections:
    - Components remaining in the parent blood bag will maintain the original outdate when the secondary container is connected to the blood bag using a sterile method such as the sterile connecting device in a closed system
    - If a sterile connecting device (closed system) is not used or a weld fails, the parent container has the same outdate as the aliquots (24 hours for RBC and plasma, 4 hours for platelets and cryoprecipitate). The same as an open system.
- Splitting blood units using the SCD is the preferred method for preparing blood component aliquots, but is not required if the parent blood component will expire within 24 hours
- Expiration of divided products may not exceed the expiration for the parent blood component
- Blood Label Check must be performed following preparation of the aliquot on both the new product and the parent bag
- Lot number and expiration date of any additional containers added to the original product container must be tracked in Sunquest BOP or on the Downtime Component Prep Log along with a weld inspection if the SCD if used for attachment

SPECIMEN REQUIREMENTS:
NA

REAGENTS/SUPPLIES/EQUIPMENT:

Reagents:	Supplies:	Equipment:
None	• Blood Component • Filter-Syringe Set (30mL or 60mL) • Syringe Tip Cap • Transfer Bag • Multi-bag set • Hemostat or clamp	• Tube Welder • Balance • Tube Sealer

QUALITY CONTROL:
SCD weld inspection is performed and documented on the associated blood component with each use

INSTRUCTIONS:

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>1</td><td>Select the appropriate transfer bag or syringe filter set for the blood split to be performed</td></tr>
<tr><td>2</td><td>Thoroughly mix the contents of the blood component</td></tr>
<tr><td>3</td><td>
<table>
<tr><th>If</th><th>Then</th></tr>
<tr><td>Dividing using the SCD</td><td>
<table>
<tr><th>If using</th><th>Then</th></tr>
<tr><td>Syringe</td><td>• Tighten the tubing on the syringe to prevent leakage
• Heat seal near the spike, remove and discard spike and blue clip
• Attach the new syringe to the original unit (refer to SOP Sterile Welder Operation Cleaning Maintenance)
• Draw the requested amount of blood product into the syringe allowing 3-5mL extra for the blood transfusion tubing</td></tr>
<tr><td>Bag or multi-bag set</td><td>• Place the empty bag on the scale and tare the scale (refer to SOP Operation of Entris 2202-1S Balance)
• Attach the new bag to the original unit (refer to SOP Sterile Welder Operation Cleaning Maintenance)
• Allow the requested amount of blood to flow into the transfer bag allowing 10-15mL extra for the blood transfusion tubing</td></tr>
</table>
• Express any residual air back into parent product container
• Seal the tubing (refer to SOP Tube Sealer: Operation and Cleaning)
</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td></td><td></td><td>

Do not separate the new component from the parent component
Perform Blood Component Processing in Sunquest (refer to SOP Blood Component Preparation in Sunquest)
Verify the expiration date/time of the products are correct and correct if needed

</td></tr>
<tr><td></td><td>Dividing without using the SCD</td><td>
<table>
<tr><th>If Using</th><th>Then</th></tr>
<tr><td>Syringe</td><td>Tighten the tubing on the syringe to prevent leakage
Sterilely insert the spike from the syringe into the blood bag port
Draw the requested amount of blood product into the syringe allowing 3-5mL extra for the blood transfusion tubing</td></tr>
<tr><td>Bag or multi-bag set</td><td>Place the empty bag on the scale and tare the scale. See SOP Operation of Entris 2202-1S Balance
Clamp the bag tubing with a hemostat or clip
Use the sterile method to insert the spike attached to the transfer bag into the blood bag port and open the clamp
Allow the requested amount of blood to flow into the transfer bag allowing 10-15mL extra for the blood transfusion tubing</td></tr>
</table>

Express any residual air in the bag back into the parent product container Seal the tubing. See SOP Tube Sealer: Operation and Cleaning
Do not separate the new component from the parent component
Perform Blood Component Processing in Sunquest (refer to SOP Blood Component Preparation in Sunquest)
Verify the expiration date/time of the products are correct and correct if needed

<table>
<tr><th>Component</th><th>Expiration Date/Time limit</th></tr>
<tr><td>RBC</td><td>24 Hours from “spiking” unit</td></tr>
<tr><td>FFP</td><td rowspan="3">4 hours from “spiking” unit</td></tr>
<tr><td>Platelets</td></tr>
<tr><td>Cryoprecipitate</td></tr>
</table>
NOTE: Both the components will have the same expiration date/time
</td></tr>
<tr><td>5</td><td colspan="2">Separate the blood products by cutting the seal</td></tr>
<tr><td>6</td><td colspan="2">
<table>
<tr><th>If container is a</th><th>Then</th></tr>
<tr><td>Syringe</td><td>Remove the stub end from the syringe and replace with a sterile cap
Division process is complete – continue with additional processing as necessary (such as irradiation)</td></tr>
</table>
</td></tr>
</table>

	Bag	Process is complete – continue with additional processing as necessary (such as irradiation)
7	Return components to the appropriate storage location	

CALCULATIONS/INTERPRETATIONS/RESULTS REPORTING/NORMAL VALUES/CRITICAL VALUES
NA

CALIBRATION:
NA

PROCEDURE NOTES AND LIMITATIONS:
- Sunquest defaults the expiration date of ALIQ aliquots to 4 hours. If desired, it is acceptable to change the expiration of FFP to 24 hours from time of processing

REFERENCES:
- *Entris 2202-1S Balance Operation Manual*
- Standards for Blood Banks and Transfusion Services. Bethesda, MD; AABB, current edition

RELATED DOCUMENTS:
FORM Component Prep Downtime Log
SOP Blood Component Preparation
SOP Operation of Entris 2202-1S Balance
SOP Sterile Welder Operation Cleaning Maintenance

APPENDIX
NA

UWMC SOP Approval:			
UWMC CLIA Medical Director	Mark H. Wener, MD	Date	
Transfusion Service Manager	Nina Sen	Date	
Compliance Analyst	Christine Clark	Date	
Transfusion Service Medical Director	Monica Pagano, MD	Date	
UWMC Biennial Review:			
		Date	
		Date	

REVISIONS:
07/12/2021: Add policy when sterile welder is not used or fails the component involved has the out-date of an open system.