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Area	Laboratory-Blood Bank
Applicability	Royal Oak

Disposition of Components From Which an Aliquot has Been Removed- Royal Oak Blood Bank

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

The purpose of this document is to provide the Blood Bank staff with guidelines used for determining whether a component from which an aliquot has been removed may be transfused to another patient.

II. PRINCIPLE:

A. The needs of both patients are considered:

1. **For the patient who received the first aliquot (original recipient):** the Blood Bank will attempt to minimize the number of donor exposures by keeping the unit available for this patient for as long as possible.
2. **For the patient who may receive the remaining volume of the component (potential recipient):** the Blood Bank will ensure that the remaining component has an adequate remaining volume (RBCs) or an adequate remaining platelet count (platelets).

III. ACRONYMS:

A. **RBC**: Red Blood Cell

B. **NI**: Not Indicated

C. **TXN'd:** Transfused

D. **MD**: Medical Director

IV. SCOPE:

This document applies only to components from which an aliquot has been removed.

V. POLICIES:

A. Policy to Limit the Number of Donor Exposures

1. The Blood Bank shall attempt to limit the number of donors to which a patient is exposed. Therefore, if an aliquot of a component is transfused to a patient, the Blood Bank shall attempt to keep the component available for that patient for as long as possible, in the event that additional transfusions are required. The remaining component shall not be released to available inventory unless:
    a. The recipient has expired, or
    b. The component's expiration date meets the criteria in the *Expiration Date of the Component* section below.

B. Expiration Date of the Component

1. The remaining component shall not be released to available inventory, even if the original recipient has been discharged, until:
    a. The day that a platelet expires.
    b. Five days before a RBC component expires.
2. The component shall not be released to inventory if the original recipient is scheduled for surgery before the component's expiration date.

C. Notification / Approval of the Patient's Nurse Required

1. This policy applies to components from which an aliquot has been removed and transfused. If the original recipient is in-house, then the Blood Bank must notify the patient's nurse or physician to obtain approval in order to release the remainder of the component to inventory so that it may be transfused to another patient. This approval shall be documented in the "Nurse's Approval" column on one of the following forms:
    a. *Disposition of Platelet Components from which an Aliquot has been Removed*
    b. *RBC Aliquot Log*
2. If the original recipient has expired, or if an aliquot has been removed but not transfused, then the "Nurse's Approval" shall be documented as not indicated (NI) as follows: "NI /pt. exp." or "NI / not TXN"d."

D. Platelet Components from which an Aliquot has been Removed

1. Any apheresis or pooled platelet component from which an aliquot has been removed must have a remaining platelet count of at least 3×10^{11} in order to release the remainder of the component to inventory or to transfuse to another patient. The remaining platelet count is calculated as follows:

Remaining Platelet Count	=	Original PLT count (from tag of original component)	X	remaining volume	÷	original volume

1. For example:
    a. *original platelet count was 4.1 x 10^{11} (from tag of original component)*
    b. *original volume (from the face label or computer) was 250 ml.*
    c. *remaining volume is 220 mL; remember that the remaining volume is the weight of the platelet + bag (when weighed on the scale) – the weight of the bag*

Remaining Platelet Count = *4.1 x 10^{11} x 220 ml ÷ 250 ml = 3.6 x 10^{11}*

1. If the remaining platelet count is less than 3 x 10^{11}, then the Medical Director (MD) shall be consulted. The MD will determine whether it is acceptable to release the remainder of the component to inventory or to transfuse to another patient.
2. The remaining platelet count calculation and the MD's decision shall be documented on the *Disposition of Platelet Components from which an Aliquot has been Removed* form.
3. It is only necessary to calculate the remaining platelet one time; before the first transfusion to the potential recipient.
4. If the tag with the original platelet count is missing, then for the purposes of calculating the remaining platelet count the original platelet count shall be assumed to be 3 x 10^{11}.

E. RBC and Plasma Units from which an Aliquot has been Removed

1. Once an aliquot is removed from a RBC unit, the unit shall be documented on the *RBC Aliquot Log*.
2. The remaining volume of the RBC unit must be ≥ 250 mL in order to release the unit to available stock. If the remaining volume is < 250 mL, the MD must be consulted to determine the appropriate status of the unit and this will be documented on the *RBC Aliquot Log*. This policy applies to all RBC units, regardless of whether the anticoagulant is ADSOL or CPDA (CPDA units generally have lower volumes to begin with).
3. Once an aliquot is removed from a plasma unit, the MD must be consulted to determine the appropriate status of the unit.

F. Neonates with Unexpected Antibodies / Expiration of the Remaining Aliquot

1. This policy applies when there are unexpected antibodies in the neonatal or maternal record. Upon the expiration date of the remaining aliquot (from which the neonate was previously transfused), a new sample may be required for crossmatching a new RBC unit. The technologist may be required

call the caregivers to request a new sample if additional crossmatching is indicated. Refer to Transfusion Medicine policy, *Neonatal Compatibility Testing Guidelines* / the policy *Unexpected Antibodies / Crossmatching* to determine whether a new crossmatch is required.

G. Demographic Discrepancy upon Neonate's Discharge

1. Upon discharge, the baby's demographic information (name) is updated in EPIC. The demographic discrepancy special message will display in the baby's caution window. If the baby has crossmatched blood at the time of discharge, errors will occur with the Soft / EPIC interface. To resolve these errors, the Blood Bank will update the baby's demographic in Soft Bank (Patient / Edit / Demographic / F8), as described in the Blood Bank CDM - *The Demographic Discrepancy, HIS DEMOG Message.* The technologist will document the *RBC Aliquot Log* as Y (Yes) or N (No) to indicate whether the baby was discharged, and will initial and date the log to indicate that the baby's demographic was updated in Soft Bank if indicated.

VI. REFERENCES:

1. AABB, *Technical Manual*, current edition.
2. AABB, *Standards for Blood Banks and Transfusion Services*, current edition.

Attachments

Disposition of Platelet Components from which an Aliquot has been Removed

RBC Aliquot Log

Approval Signatures

Step Description	Approver	Date
	Ann Marie Blenc: System Med Dir, Hematopath	5/24/2023
	Kristina Davis: Staff Physician	5/19/2023
Policy and Forms Steering Committe (if needed)	Brooke Klapatch: Medical Technologist Lead	5/17/2023
	Kelly Sartor: Mgr, Division Laboratory	5/17/2023
	Brooke Klapatch: Medical Technologist Lead	5/17/2023