

Kaiser Permanente Medical Center, San Francisco Northern California Region

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	Work Instruction					
Title:	TS-Unusual Product F	Request Policy	WI Number SFOWI-0107 Revision: 22			
Department: Immunohematology Area: 2425 Geary Blvd SFO Hospital Lab		Document is in the Final Approval Process. 2 - approvals are required				
Type of Document: Work Instruction		Review Period - 340 Days				

#### **PURPOSE**

To ensure that patients receive special blood components when it is indicated, to standardize special blood product order practice and to prevent wastage. This policy establishes the requirement for pathologist approval prior to filling requests for unusual product(s).

#### **CONTROL**

- A. Physician will prescribe blood and blood component including special requirement(s) according to the patient's diagnosis and treatment plan and place order(s) in HealthConnect.
- B. When using manual requisition i.e. during HealthConnect downtime, ward staff will check the specific special requirement box(es) on the Transfusion Service Laboratory Requisition.
- C. Individual patient's needs for special blood components will be entered in the LIS if patient qualifies. Criteria for special transfusion needs are listed in the procedure section.
- D. KP San Francisco Transfusion Service stocks only leukoreduced blood and platelet pheresis. These are considered as 'CMV reduced risk' or 'CMV-safe' alternative to donor blood tested negative for CMV. No additional CMV testing is required when the components have been prestorage leukoreduced.

#### **PROCEDURE**

A. The following guidelines are used to determine if a pathologist should be notified. Notification and decision must be documented as Comments in LIS.

#### Call pathologists for approval if:

- 1. Platelets
  - a. **More than two platelet** doses ordered within 12 hours except for:
    - i. patient who is in surgery
    - ii. within 12 hours post CV surgery

- iii. massive transfusion protocol (MTP)
- iv. patient who is actively bleeding.

# b. Requests for **crossmatched platelets** or **HLA matched platelets** or **HPA antigen negative platelets**:

- i. Pathologist will evaluate the patient for clinical evidence of platelet refractory state before deciding if patient qualifies for the special platelets.
- ii. Pathologist may consult with BCP Medical Director to discuss test results and treatment options.
- iii. Samples must be received by BCP before noon on M-F. Consult BCP Reference Lab for sample requirements.
- c. Requests for **volume reduced or dried** platelets except for neonates and infants less than one year old or TACO patients.
- d. Request for **washed** platelets refer to section below for 'Washed red cells or platelets'.
- g. Request is for a patient diagnosed with or suspected to have **HIT** (Heparin induced thrombocytopenia) or **TTP** (Thrombotic thrombocytopenic purpura) or **ITP** (Idiopathic thrombocytopenic purpura).

#### 2. Plasma

- a. **More than 6 FFP** or equivalent ordered **in 24 hours except** for patients who is **in surgery**, **plasmapheresis**, **massive transfusion protocol** (MTP) or actively bleeding.
- b. Request for **IgA deficient** plasma.
- 3. **Washed red cells or platelets** requested **other than** for the following conditions:
  - a. IgA deficiency
  - b. Polyagglutination
  - c. Allergic reaction to plasma proteins
- 4. **Irradiated** cellular blood products (**RBC**, **whole blood**, **platelets**, **granulocytes**) to prevent Graft vs Host Disease, requested for patients **other than** the following:
  - a. Neonates (less than 4 months old)
  - b. Infants (less than one year of age) who received intrauterine transfusions or exchange transfusion
  - c. Directed units from blood relatives
  - d. Donor is selected for HLA compatibility by typing or crossmatching
  - e. Hematologic malignancies (leukemia, lymphoma, myeloma, MDS, etc.)
  - f. Pediatric malignancies (sarcoma, small round blue cell, etc.)
  - g. Aplastic anemia with immunosuppressive therapy
  - h. Stem Cell and Bone Marrow transplant patients
  - i. Severely immunosuppressed e.g. intensively treated with high dose chemotherapy or radiation therapy
  - j. Cellular immunodeficiency syndromes (congenital T-cell immune deficiency syndromes e.g. DiGeorge's, SCID, Wiskott-Aldrich, thymic hypoplasia)
  - k. Purine nucleoside analogue therapy e.g. fludarabine, cladribine, pentostatin, etc.

- 1. Anti-T-cell agent therapy e.g. anti-CD52, ATG, etc.
- m. Granulocyte transfusions

Note: Solid Organ transplant candidates/patients and HIV/AIDS patients do not routinely qualify for IRR products unless they are immunosuppressed.

- 5. **CMV Negative** cellular blood products (**RBC**, **whole blood**, **platelets**)
  - a. Check the computer for the patient's (except for infants less than 1 year old) CMV status. Patients who have tested CMV Positive do not qualify for CMV Negative blood products.
  - b. The following patients **qualify to get CMV negative blood products** unless unavailable from BCP:
    - i. Neonates (less than 4 months old)
    - ii. Infants (less than one year of age) who received intrauterine transfusions or exchange transfusions
    - iii. ECMO or exchange transfusions
    - iv. Pediatric CMV-seronegative stem cell/bone marrow transplant candidates/patients (unless the donor is known to be CMV seropositive)
    - v. Pediatric CMV-seronegative patients with small round blue cell malignancy
    - vi. Pediatric CMV-seronegative patients with solid organ malignancy
    - vii. Pediatric CMV-seronegative patients (1-18 years) receiving liver, kidney, or pancreas transplants from CMV-seronegative donors
    - viii. Pediatric severe congenital immune deficiency
    - ix. All pregnant women at the request of the clinician
    - x. CMV-seronegative women who are breast feeding premature infants
    - xi. Adult CMV-seronegative patients receiving heart/lung transplants from CMV-seronegative donors
  - NOTE: Substitution with leukoreduced CMV-untested is acceptable when CMV negative cellular blood products are not immediately available. Transfusion-induced CMV infection is prevented equally well either by leukoreduced (CMV-safe) blood products or CMV-seronegative blood products. Notify the ordering provider as courtesy.
  - c. CMV negative cellular blood products (RBC, whole blood, platelets) request **that does not meet the criteria** above **will be honored by giving patient leukoreduced (CMV-safe) products** (except for granulocytes). No further physician notification is needed.
  - d. If a provider insists on ordering CMV negative blood products outside of this protocol, fill the order and contact Transfusion Service Medical Director when available to educate the provider on appropriate blood product ordering.
- 6. **Leukoreduced** cellular blood products (**PRBCs and platelets**) 100% of donor PRBCs and platelets are prestorage-leukoreduced.
- 7. **HgS negative** red blood cells **other than** the following patients:
  - a. Infants receiving exchange transfusions.
  - b. Patients with Sickle cell disease, receiving routine transfusion or exchange

transfusions.

#### 8. Transfusion-Associated Circulatory Overload (TACO)

a. Request for any blood product for patients identified by a physician or an authorized health professional as being at increased risk for TACO.

Note: Refer to SFOWI-0064 TRALI and TACO Risk Reduction Plan.

#### B. Processing request of unusual blood product order

- 1. Check comments and transfusion requirements in the LIS to see if the request had already been approved.
- 2. Check patient's CMV status.
- 3. Call the patient's nurse or physician's office to verify the patient's diagnosis and condition if not indicated on the requisition or if the patient does not qualify per protocol.
- 4. Obtain the ordering provider's name, phone or pager number if the patient does not qualify and the provider still insists.
- 5. Check the patient's transfusion history.
- 6. If the order is received during working hours, contact the Transfusion Service Medical Director or the designated pathologist as soon as possible for consultation or authorization to fill the order.
  - a. Do not delay filling the order if the request is an emergency unless the request may adversely affect patient safety e.g. volume overload from unnecessary plasma/platelet transfusions, platelets for HIT/TTP patients. Fill the order first if unable to reach the Medical Director.
  - b. Continue to attempt to contact and gain approval for the order from the Medical Director or pathologist.

### NOTE: Refer to SFOWI-0062 Notification of a Pathologist SOP.

- 7. If the order is received after regular working hours, fill the order first if possible and notify the Medical Director (or another pathologist) the following morning for the unusual requests (except for requests that may adversely affect patient safety e.g. volume overload from unnecessary plasma/platelet transfusions, platelets for HIT/TTP patients). *NOTE: Refer to SFOWI-0062 Notification of a Pathologist SOP.*
- 8. If patient qualifies for the special need(s), enter the Transfusion Requirement(s) in LIS.

#### REFERENCE

AABB, Standards for Blood Banks and Transfusion Services, current edition, Bethesda, MD.

#### **Associated Documents:**

**External Documents** 

#### **Associated Documents:**

SFOWI-0062 -- TS-Notification of a Pathologist

SFOWI-0064 -- TS-TRALI and TACO Risk Reduction Plan

SFOWI-0105 -- TS-Neonatal Transfusion

Click to Open an Associated Document

#### **Documents Generated:**

## **Document Revision History:**

Revision: 22 Date Created: 09/22/2005 Last Approval Date: 05/16/2019 Date of Last Revision: 06/19/2019

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# **Reason for Change:**

Revision:	Sec/Para Changed	Change Made:	Date
1	N/A	Initial Issue of Document	
2	Plasma	More than 6 FFP or equivalent ordered in 24 hours except in surgery and plasmapheresis.	5/7/06
2	Platelet	More than 2 units of platelets ordered within 12 hours except patient is actively bleeding, in surgery or 12 hours post CV surgery.	5/7/06
3	Approver	New lab director	12/27/06
4	Control	Add and delete special need in RILIS	5/6/07
5	Approver	New Lab Director	7/29/07
6	Procedure A-1-d	Add except for neonates and infants less than one year old.	11/30/07
7	Control D, Procedure A5	Use CMV-safe products for CMV-neg request.	3/26/10
8	Procedure A5	Clarified CMV-neg blood product criteria.	11/24/10
9	Approver	Changed Medical Director.	6/1/11
10	Procedure A. Procedure A.1.b and c. Procedure A.1.e. Associated Documents.	Added documentation instruction. Added BCP's service needs. Added request for patients with HIT and TTP. Added documents.	11/25/11
11	Control Purpose and Control Procedure B.5.6.	Deleted references to RILIS Classic and added HealthConnect. Rephrased sentences. Added reference to SFOWI-0062.	12/1/2011
12	Procedure A.1.a. Procedure A.2.a. Procedure A.1.e.	Added 2 new criteria for platelet request. Added 2 new criteria for FFP request. Moved from A.3.	9/20/2012
13	Approver	New Lab Director.	5/16/13
14	Approver Procedure A.4. Procedure A.4. & 5.c.i. Procedure A.4.g. Procedure A.5.a. Procedure A.5.	New BB Medical Director. Deleted 'granulocytes'. Added Note. Added neonates. New. Added SC and BM TX. New. Added to check CMV status. Reformatted.	8/5/13
15	Procedure A.5.c.NOTE Procedure A.3.a., b., c. Procedure B.7.	Corrected typo error - changed 5.b. to 5.c. New. Added qualifying conditions for washed RBCs and platelets. New. Added instructions to enter Transfusion Requirements in LIS.	9/16/13
16	Procedure A.1. Procedure A.4.	Added request for HPA antigen negative platelets. Added patients with cellular immunodeficiency syndromes and patients being treated with purine analogues as qualified for irradiated blood products.	8/22/14
17	Control E.  Procedure A.1.b  Procedure A.4.e, f, g, I & m  Procedure A.5.b. iii, iv, v, vi, viii, xi	Deleted BB staff will confirm discontinuation of special requirement if not on future requisitions.  Revised to clarify policy regarding indications for specially selected platelets - Xm'd, HLA-matched, HPA antigen negative platelets. New AABB Std.5.19.6  Added 5 clinical indications for Irradiated blood products per new TPMG guidelines.  Added 6 clinical indications for CMV-neg blood products per new TPMG guidelines.  141002_cmvneg_irr_recommendations_v2.docx  Deleted indications for leukoreduced blood products as KPSF	10/10/14
	Procedure A.6	stocks only leukoreduced cellular blood products thus	Page

	Procedure B.	eliminating the need to specially request for it.  Revised and reworded to reflect current practice.	
18	Procedure A.8.	New AABB Std. 5.19.7 for patients at increased risk for TACO.	5/2/16
19	Approver	New CLIA Director.	9/28/16
20	A.1.c. Volume reduced or Dried platelets A.8.a. TACO	Added request for TACO patients does not need pathologist approval.  Added reference to SFOWI-0064 TRALI and TACO Risk Reduction Plan.	2/5/18
21	Approver	Change of Lab Director and Transfusion Service Medical Director	4/22/19
22	Procedure A.1.g.	Added ITP as the third DX that requires pathologist's approval for platelet request.	6/19/19

### **Notification List:**

# Approvals: First Approver's Signature

Name: Sarah C Cherny/CA/KAIPERM Title: Transfusion Service Medical Director

#### Second Approver's Signature

Name: Elizabeth M Hosfield/CA/KAIPERM Title: Chief of Pathology; CLIA Director

#### **Document History Section**