



# KAISER PERMANENTE®

<b>DOCUMENT NUMBER:</b> RL TS ABO/Rh/Desc - 0002
<b>DOCUMENT TITLE:</b> Platelet Quality Control: Screen for isoagglutinin
<b>DOCUMENT NOTES:</b>

<b>LOCATION:</b> SCPMG-dft	<b>VERSION:</b> 5
<b>DOC TYPE:</b> Transfusion Service	<b>STATUS:</b> Draft

<b>EFFECTIVE DATE:</b> 01 Oct 2018	<b>NEXT REVIEW DATE:</b>
<b>RELEASE DATE:</b>	<b>EXPIRATION DATE:</b>

<b>AUTHOR:</b> G938509	<b>PREVIOUS NUMBER:</b> KQE: 9. 9.2-1-0501.01
<b>OWNER:</b> G938509	<b>CHANGE NUMBER:</b> SCPMG-CR-0465

## Platelet Quality Control: Screen for Isoagglutinin

**Purpose** Describe the procedure of screening plateletpheresis components for isoagglutinins.

---

**Policy**

- Plateletpheresis component manufactured with platelet additive solution (PAS) are not required to have isoagglutinin screen performed.
- Testing should be performed upon receipt or prior to dispense of non-PAS plateletpheresis.
- Plateletpheresis with the same DIN and labeled as 1<sup>st</sup> container, 2<sup>nd</sup> container (single donor) only require one screen to be performed from any one of the containers.
- For guidance in plateletpheresis component selection for non-refractory and refractory patients, refer to SOP “*ABO And Rh Selection for Blood Component Orders*”.

---

**Specimen source** Segments from plateletpheresis (non-PAS) components

---

**Equipment and Reagents**

- 10 x 75 or 12 x 75mm test tubes
- Uniform drop transfer pipettes
- Pipette to transfer 1mL and 10  $\mu$ L
- Isotonic saline
- Serological centrifuge
- Marking pen
- Agglutination Viewer
- 3 % Reverse Grouping Cells (A1 cells or B cells)

---

*Continue on next page*

## Platelet Quality Control: Screen for Isoagglutinin, Continued

**Procedure:**

Follow the steps below to determine isoagglutinin screen for plateletpheresis	
Step	Action
1.	Upon receipt of group O, A and B plateletpheresis component (which are not manufactured with PAS), remove a segment and put it in a labeled test tube.
2.	Testing can occur at any time but must be completed BEFORE assignment of the non-PAS additive platelet to a patient who presents the corresponding A and/or B antigen to the isoagglutinins (Anti A and/or Anti-B) in the product.  For example: Type A patient receiving Type O non-PAS additive platelets-the product must be negative for Anti-A isoagglutinin.
3.	To a small test tube labeled with the DIN add 1 mL of saline. (The saline tubes can be prepared in advance, capped, and stored in the refrigerator)
4.	To the saline tube add 10 µL of the platelet sample. Mix. This is approximately 1:100 dilution of plasma
5.	Label the appropriate test tube(s) with DIN and: <ul style="list-style-type: none"> <li>• Tube A – to test group B or O platelets</li> <li>• Tube B – to test group A or O platelets</li> </ul>
6.	Add two drops of the diluted platelet sample (1:100) to appropriate tube(s).
7.	<ul style="list-style-type: none"> <li>• Add one drop of group A cells to the tube labeled A (if testing for anti-A)</li> <li>• Add one drop of group B cells to the tube labeled B (if testing for anti-B)</li> </ul>
8.	Mix the tubes and spin for 15 sec. or the calibrated time for an immediate spin test.
9.	Read and record results on the “Isoagglutinin Screening for Platelets” form. <ul style="list-style-type: none"> <li>• Record the CLS initials and date tested</li> <li>• Record or attach a DIN (Unit #) from the bag to the form under Unit number column</li> <li>• Record the ABO type in the Type column</li> <li>• Record the graded results for the A and B cell as 0 – 4+ or NT if not tested.</li> </ul> Note: Testing is Immediate Spin only and does not need to proceed to the antiglobulin phase.
10.	Completed “Isoagglutinin Screening for Platelets” forms are reviewed by Transfusion Service Manager or designee.

*Continued on next page*

## Platelet Quality Control: Screen for Isoagglutinin, Continued

**Procedure:**

Follow the steps below to record interpretations of results ....	
Results	Action
<b>Negative</b>	<p><b>Negative</b> result indicates that the immediate spin screen of anti-A and/or anti-B is below a dilution of 1:100.                      Place a colored dot or tag the plateletpheresis component to indicate that it was tested and was a negative isoagglutinin screen.</p> <ul style="list-style-type: none"> <li>• Check or mark the negative box on the Isoagglutinin Screening for Platelets form under interpretation.</li> <li>• Enter a comment in the product comments section that the unit has low isoagglutinin screen (this will inform others that the test was performed and does not need to be repeated).                         <ul style="list-style-type: none"> <li>○ The canned comment can be used: iso Neg = Platelet isoagglutinin NEGATIVE</li> </ul> </li> </ul>
<b>Positive</b>	<p><b>Positive</b> test result (any strength of macroscopic reaction) in either or both of the tubes indicates the immediate spin screen of anti-A and/or anti-B is higher than 1:100 and must be labeled as a positive isoagglutinin screen.</p> <ul style="list-style-type: none"> <li>• Check or mark the positive box on the Isoagglutinin Screening for Platelets form under interpretation.</li> <li>• Place a color dot, tag or label on the plateletpheresis with a manila tag that reads “positive isoagglutinin screen”.</li> <li>• Enter a component comment in Cerner that this unit has a positive isoagglutinin screen.                         <ul style="list-style-type: none"> <li>○ The canned comment can be used: iso Pos= Platelet isoagglutinin POSITIVE (isoagglutinin reactive at a dilution of 1:100)</li> </ul> </li> <li>• If the isoagglutinin screen of a group O plateletpheresis is positive in either the anti-A or anti-B tube, it should be labeled as positive isoagglutinin screen.</li> </ul>

*Continue on next page*

## Platelet Quality Control: Screen for Isoagglutinin, Continued

---

**Controlled Documents**

The following controlled documents support this procedure:

ABO and Rh Selection for Blood Component Orders

Isoagglutinin Screening for Platelets-Form

---

**Authors:**

All SCPMG Transfusion Service Mangers  
Regional Blood Bank Compliance Officer

---

**Distribution**

All SCPMG Transfusion Services

---

*Continue on next page*

## Platelet Quality Control: Screen for Isoagglutinin, Continued

Reviewed and approved by: Electronically Signed	April 2, 2011
_____ Virginia Vengelen-Tyler, MBA, MT,ASCP(SBB), CQA(ASQ) Regional Blood Bank Compliance Officer	_____ Date
Signature Collected Electronically	March 15, 2011
_____ Adriana A. Bedoya, M.D. FCAP, FASCP Medical Director- San Diego –SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ Gary A. Gochman, MD, Medical Director – Tri-Central SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ Jeffrey D. Shiffer, MD. Medical Director –San Fernando Valley SA	_____ Date
Signature Collected Electronically	March 15, 2011
_____ Joseph C. Thompson, MD. Medical Director –Metropolitan SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ David R. Huebner-Chan, MD. Medical Director –Orange County SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ Dong A. Quach, MD. Medical Director –Inland Empire SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ Ramesh H. Doshi, MD. Medical Director- Tri-Central SA	_____ Date
Signature Collected Electronically	March 31, 2011
_____ Brian E. Platz, MD, Medical Director- West Los Angeles	_____ Date

## Platelet Quality Control: Screen for Isoagglutinin, Continued

### DOCUMENT HISTORY PAGE

Effective Date: April 2, 2011

Change type: new, major, minor etc.	Changes Made to Document – Describe	Signature responsible person/Date	Med. Dir. Reviewed/ Date	Lab Manager reviewed/ Date	Date change Imp.
New					
Minor V.01	1. Added Attachment-revised to match sop 2. Added form to record results. 3. Added related documents 4. Added mention of canned comments	Ginny Tyler			

IMP = Implemented

<b>MasterControl History of Change:</b>		
<b>Change type: new, major, minor etc.</b>	<b>Version #</b>	<b>Description of Change</b>
Major	3	Removed statement to provide ABO identical when possible. In policy, added provision for refractory patients not to receive Non-ABO-identical platelets for the positive isoagglutinin.
Major	4	Added statement that platelets manufactured with platelet additive solution (PAS) do not require isoagglutinin testing. Removed policy statements regarding selection of platelets for patients, refer to separate SOP. Added step that completed Isoagglutinin Screening for Platelets form is reviewed by TS Manager or designee.
Minor	5	Rewrote step 2 to correct mis-statement of current policy. Testing must occur prior to assigning non-PAS additive platelet to a patient who presents the corresponding A and/or B antigen to the isoagglutinins (Anti A and/or Anti-B) in the product.-not prior to releasing product to a patient with an non-identical ABO type.