



**Request for Matched Platelets or Platelet Testing**

**Plt/ HLA Antibody Screen**                       **Plt Crossmatch**  
 **Historically Compatible Donor**                       **HLA Matched Plt**

*Please call the Reference Laboratory prior to collecting a sample from the patient.*

Patient Name \_\_\_\_\_ Order \_\_\_\_\_  
Date \_\_\_\_\_  
Numerical Identifier \_\_\_\_\_ Order Time \_\_\_\_\_  
ABO/Rh Type \_\_\_\_\_ D.O.B. \_\_\_\_\_ Male [ ] Female [ ]  
# Of Pregnancies \_\_\_\_\_ Race \_\_\_\_\_ Wt. \_\_\_\_\_ Ht. \_\_\_\_\_  
Hospital \_\_\_\_\_ Phone # \_\_\_\_\_  
Dr. \_\_\_\_\_ Ordering Tech \_\_\_\_\_  
Diagnosis \_\_\_\_\_ Is the patient on Antibiotics?    Y    N  
Is the patient currently under going chemotherapy?    Y    N - Please list medications and dates

List all current medications. \_\_\_\_\_

Does the patient have an enlarged spleen? Yes No                      Or had a splenectomy? Yes No  
Is the patient currently bleeding? Yes No                                      Any petichiae? Yes No  
Does patient have symptoms of DIC? Yes No                                      Is the patient septic? Yes No  
Do platelets need to be CMV negative? Yes No  
Any recent IVIG? Yes No    If yes, date of last: \_\_\_\_\_  
Previous RBC transfusions? Yes No    If yes, date of last: \_\_\_\_\_  
Is the patient a past bone marrow / stem cell recipient? Yes No  
Is the patient a potential bone marrow / stem cell recipient? Yes No

**Anticipated Transfusion Schedule:**

Please complete the following for the most current platelet transfusions. (at least 3 transfusions):

Date of Transfusion	Type of Product	Pre-Transfusion		Post-Transfusion	
		Date / Time	Count	Date / Time	Count
_____	_____				
_____	_____				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

## Minimum Sample Requirements

Platelet / HLA antibody screening: Two 7-10ml pink or purple top EDTA tubes. Keep samples at room temperature. The specimens need to be received at the reference lab within 48 hours of being drawn.

Crossmatched platelets: Two 7-10ml pink or purple top EDTA tubes. Keep samples at room temperature. The specimens need to be received at the reference lab within 48 hours of being drawn.

HLA typing for HLA matched platelets: 2 – 7ml lavender top tubes and 1 - 10-ml red top tubes (no gel) at **room temperature** drawn Sunday - Thursday. The specimens need to be received at the reference lab by 4 PM the same day they are drawn.

Platelet refractoriness can have many causes, both immune and non-immune. Immune complexes due to the patient's medical condition can also affect platelet recovery. When the majority of units are crossmatch compatible and the antibody screen is negative, it is important to reevaluate non-immune causes including fever, sepsis, drug-induced thrombocytopenia (eg. amphotericin B, vancomycin, heparin), subclinical bleeding, DIC, splenomegaly (sequestration can account for 30-40% of the platelet dose), or bone marrow transplant issues. The best way to monitor the effectiveness of a platelet transfusion is by calculating the corrected count increment (CCI). The CCI adjusts the platelet increase for the patient's size and the platelet dose.

$$\text{CCI} = \frac{(\text{platelet increment}^*) \times (\text{patient's body surface area in M}^2)}{\text{number of platelets transfused} \times 10^{11}}$$

\* Platelet increment = post transfusion count at 10-60 minutes – pretransfusion count

A CCI of  $> 7.5-10 \times 10^9/l$  drawn at 10 min.-1 hr post transfusion or a CCI  $> 4.5 \times 10^9/l$  for samples drawn at 18-24 hrs is considered acceptable and not indicative of platelet refractoriness. Poor 1 hour responses are more likely immune mediated while a poor 24 hr recovery is more likely due to non-immune (clinical) causes.