
Lab Dept: Transfusion Services

Test Name: PLATELET TRANSFUSION

General Information

Lab Order Codes: TPLT

Special charges:

HLA Matched-MHLA, AHLA
PLA1 Negative – PLAT, APLA1
Platelet Crossmatching PLTX – CPLT

Synonyms: Leukocyte Reduced Platelets; Random Platelets; Platelet Rich Plasma; Platelet concentrate; Leukocyte Reduced Platelet Pheresis; Single-Donor Platelets; SDP Platelet pheresis; Apheresis Platelets; LRPB

CPT Codes: P9035 – Platelet pheresis, Leukocyte reduced
86806 – Lymphocytotoxicity assay, visual crossmatch, without titration
86813 – HLA Matched
86945 – Irradiation
86985 – Volume Reduction
86965 – Pooling
86903 – Platelet Antigen typing
86999 – Washing
86022 – Platelet Crossmatch

Test Includes: Leukocyte Reduced Platelet Pheresis consists of platelets suspended in 200-300 mL of plasma collected by apheresis. Each unit contains at least 3×10^{11} platelets, and $\leq 5.0 \times 10^6$ leukocytes. One pheresis unit equals 5-6 random unit platelet concentrate.

Logistics

Test Indications: Refer to Guidelines for the Transfusion of Blood [Guidelines for the Transfusion of Blood Components](#)

Platelet Crossmatching or HLA-Matched Platelets may be useful for patients receiving repeated platelet transfusions who have become refractile, and for patients who repeatedly develop febrile non-hemolytic transfusion reactions after platelet transfusions.

Volume Reduced Platelets are indicated in the event that ABO - incompatible platelets must be transfused due to availability or in patients with severe fluid restrictions. Refer to [Blood Component Compatibility Chart](#)

Lab Testing Sections: Transfusion Services

Phone Numbers: MIN Lab: 612-813-6824

STP Lab: 651-220-6558

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 2 hours

Standard Dose/Volume:

<10 kg: 10 – 15 mL/kg up to one unit or 50 mL maximum
10 – 15 kg: 1/3 pheresis unit
15 – 25 kg: 1/2 pheresis unit
>25 kg: 1 pheresis unit

Rate of Infusion: 10 minutes/unit, <4 hours

Administration: Must be administered through a blood component administration filter. Volumes ≤ 60 mL may be issued by the Transfusion Service in prefiltered syringes.

Crossmatch: Platelets must be ABO compatible. Crossmatch is not required.

Irradiation: Yes, for specific patient populations.

Order Instructions: Indicate number of units or volume in mL's; time and dose needed; and indication for transfusion.

Specify on the Transfusion Request Order Form special needs: Irradiate, Volume Reduce, Washed, Platelet Crossmatch, PLA1 negative, HLA matched.

Expiration: Store at 20 – 24°C with continuous agitation for 5 days. Pooled or aliquoted platelet transfusions must begin within 4 hours of preparation.

Do Not refrigerate.

Specimen

Specimen Type: Refer to [ABO/Rh](#) if patient requires testing

Patient Preparation: The patient must have a Medical Records band for checking against the component Unit Tag and the Transfusion Request Order Form prior to administration.

Interpretive

Methodology: Platelets contain stable coagulation factors and labile factors V and VIII. Refer to [Blood Component General Information](#) for greater detail.

Contraindications: Refer to [Guidelines for Transfusion of Blood Components](#)

References: [Circular of Information of the Use of Human Blood and Blood Components](#) (current edition) AABB, American Red Cross, America's Blood Centers

Updates:

- 11/08/2004: Note change to platelet dosage for patients <20 kg.
- 8/07/2007: Update for platelet dosage levels.
- 2/12/2013: CPT update
- 3/12/2013: Removed references to pooled platelets

- 11/04/2024: Updated links