Transfusion Guidelines

Platelets

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| Laboratory Result | Recommendation | Comments |
| <100 K/µL | Transfuse in neurologic or ophthalmologic procedures. |  |
| <50 K/µL | Transfuse in patients who are actively bleeding or undergoing major invasive procedures/surgery within the next 4 hours. | Use before invasive procedures/surgery in patients without thrombotic manifestations may be considered when the risk of bleeding is high. |
| <20 K/µL | Transfuse in unstable, non-bleeding patients.  Transfuse in patients receiving heparin.  Transfuse all outpatients or those who are to be discharged. |  |
| <10 K/µL | Transfuse in patients with fever. |  |
| <5 K/µL | Use prophylactically in stable, non-bleeding patients. |  |
| Any | Transfuse in patients with dysfunctional platelet count (eg, medication, disease-related, after bypass). | Use to treat bleeding due to critically decreased circulating platelet counts or functionally abnormal platelets. |

Use in patients with autoimmune thrombocytopenia, thrombotic thrombocytopenic purpura/hemolytic uremic syndrome, or heparin-induced thrombocytopenia with thrombosis should be avoided except for life-threatening hemorrhage.

Apheresis platelet contains at least ≥3.0 x 1011 platelets per bag in about 100-500 mL of plasma.

Average adult: 1 unit apheresis platelets raises platelet count 10-60 K/µL.

Pediatric: 10 mL/kg apheresis platelets raises platelet count 50-100 K/µL.

Measure platelet count from 10-60 minutes after transfusion for platelet transfusion recovery. Measure platelet count 24 hours after transfusion to assess platelet survival

Response to platelet transfusion is adversely affected by the presence of fever, sepsis, splenomegaly, severe bleeding, consumptive coagulopathy, HLA alloimmunization, and treatment with certain drugs (for example, amphotericin B).

When pre-procedural transfusion is deemed necessary, a posttransfusion count should be obtained to assure an appropriate increment before performance of the procedure.