
This review includes a history and current status of transfusion-transmissible risks of HIV, hepatitis C virus, West Nile virus, *Trypanosoma cruzi*, Babesia, dengue viruses, and variant Creutzfeldt-Jakob disease prion. It addresses the challenges noted and measures taken by the field of transfusion medicine to minimize the risk of emerging infectious disease agents. Mitigation strategies such as specific donor deferral criteria, screening assays, discontinuation of blood collection in specific geographic areas, and pathogen reduction technologies are discussed.


The authors report on the results of the Resolving Infection in Neutropenia With Granulocytes study. The recently completed randomized controlled trial studied the efficacy of high-dose granulocyte transfusion therapy.


The AABB (formerly American Association of Blood Banks) developed this practice guideline to provide clinical recommendations for hemoglobin concentration thresholds and other clinical variables that trigger red blood cell (RBC) transfusions in hemodynamically stable adults and children. The strongest recommendation was for adhering to a restrictive transfusion strategy (7–8 g/dL) in stable patients in the hospital.


The AABB developed this practice guideline to provide clinical recommendations on the appropriate use of platelet transfusion in adults. The strongest recommendation was for the use of prophylactic transfusion to reduce the risk of spontaneous bleeding in hospitalized adult patients with therapy-induced hypoproliferative thrombocytopenia. For such patients, a threshold of 10,000/µL or less should be used, and doses up to a single apheresis unit or equivalent are sufficient; greater doses are not more effective, and lower doses are equally effective.


As compared with a liberal transfusion strategy, a restrictive strategy significantly improved outcomes in patients with acute upper gastrointestinal bleeding.


The results of this study support the need for the continued use of prophylaxis with platelet transfusion and show the benefit of such prophylaxis for reducing bleeding compared with no prophylaxis.


According to results from this study, therapeutic platelet transfusion could become the new standard of care after autologous stem cell transplantation; however, prophylactic platelet transfusion should remain the standard for patients with acute myeloid leukemia. This new strategy should be used by select hematology centers if their health care team is well educated and experienced in the new approach and can react in a timely way to the first signs of central nervous system bleeding.

Steiner ME, Triulzi DJ, Assmann SF, et al. Randomized trial results: red cell storage age is not associated with a significant difference in multiple organ dysfunction score or mortality in trans fused cardiac surgery patients. Paper presented at: AABB Annual Meeting; Philadelphia, PA; October 25–28,
Cardiac patients often require multiple RBC units, so they may be exposed to units that have been stored the longest. This study aimed to determine whether a difference in patient outcomes occurred after the transfusion of units stored for 10 days or less versus units stored 21 days or longer.


Among patients with septic shock, the rates of 90-day mortality and ischemic events as well as use of life support were similar among those assigned to blood transfusion at a higher hemoglobin threshold and those assigned to blood transfusion at a lower threshold; the latter group received fewer transfusions.


This Sixth Edition of the American Society for Apheresis (ASFA) Special Issue has further improved the process of using evidence-based medicine in the recommendations by consistently applying the category and GRADE system definitions and eliminate level of evidence criteria. This article consists of 78 fact sheets for therapeutic indications in ASFA categories I to IV and includes multiple clinical presentations and scenarios that are individually graded and categorized.