# Blood Banking/Transfusion Medicine CC Exam Module Study Guide

**Registrants for the BB/TM only or combined Primary/BB/TM CC exam have only a single 150-question BB/TM module.**
The module's topic list extends across both page 1 & 2.

| CC BB/TM – Blood Banking/Transfusion Medicine (Mandatory 150-Question Module) | |
|---|---|
| • 2,3 DPG in stored blood | • IV fluids compatible with blood components |
| • ABO typing change | • IVIG indications |
| • additives for red cell preservation | • leukocyte reduction; donor characteristics |
| • albumin; ACE inhibitors; transfusion reactions | • massive transfusion; Rh compatibility |
| • allergic reaction risk reduction | • maternal antibody formation in pregnancy |
| • allogeneic bone marrow transplant; donor matching | • naturally occurring antibodies |
| • allogeneic stem cell transplant; engraftment | • neonatal alloimmune thrombocytopenia treatment |
| • alloimmunization risk | • neonatal transfusion |
| • anaphylactic transfusion reactions due to anti-IgA; prevention | • neonatal transfusion increments |
| • antibody identification; lowering pH | • newborn exchange transfusion; compatible blood |
| • autoimmune hemolytic anemia; transfusion risks | • newborn; weakly positive DAT |
| • bacterial contamination of blood products; Yersinia | • one volume plasma exchange calculation |
| • bacterial contamination of platelets | • Parvovirus B19 transmission |
| • blood donor with bacteremia | • passinger lymphocyte syndrome |
| • blood salvage program standards | • physiologic adaptations to blood loss and anemia |
| • CAR T-cell therapy | • plasma transfusion indications |
| • cell panel; ABO discrepancy | • platelet alloimmunization |
| • cell panel; alloantibodies; emergency transfusion | • platelet storage errors |
| • cell panel; Anti-K | • platelet transfusion efficacy |
| • cell panel; high frequency alloantibodies | • platelet transfusion refractoriness |
| • cell panels; alloantibody identification | • platelet transfusion; crossmatch |
| • cell panels; warm autoimmune hemolytic anemia | • platelet transfusions; post-transfusion platelet count increment calculations |
| • chronic granulomatous disease; acanthocytes | • platelet transfusions; survival time |
| • CMV risk of blood products | • PNH; transfusion |
| • coagulation factors in cryopoor plasma vs. FFP | • positive Ab screen, negative DAT |
| • compatibility testing; antiglobulin phase | • positive autologous control; neg antibody screen |
| • complement binding alloantibodies | • positive DAT; elution studies |
| • cryoprecipitate; features | • post-surgical bleeding |
| • delayed hemolytic reaction; blood smear findings | • post-HPC transplant microangiopathic thrombotic disorders |
| • donor criteria; plateletpheresis | • post-transfusion increment, factor IX |
| • donor deferral criteria | • posttransfusion purpura |
| • donor deferral; malaria prophylaxis | • posttransfusion sepsis; risk reduction |
| • donor deferral; rabies vaccine | • preprocedure blood components; thoracentesis/paracentesis |
| • donor evaluation; medications | • preprocedure warfarin reversal |
| • donor reactions | • preservative solutions for RBC storage |
| • donor reactions; long term effects of donation; iron deficiency anemia | • rare blood types; thawed time to transfuse |
| • donor reactions; vasovagal | • RBC antigens most likely to induce alloantibodies in males |
| • donor testing; repeatedly reactive infectious disease tests | • RBC transfusion threshold; pediatrics |

# Blood Banking/Transfusion Medicine CC Exam Module Study Guide

| | |
|---|---|
| • drug induced immune hemolytic anemia | • RBCs stored in AS-1; hematocrit |
| • eluate Rh reactivity | • recombinant factor VIIa; FDA approved indications |
| • emergency transfusion; adverse reaction | • repeat ABO typing, outside blood |
| • emergency transfusion; mixed field agglutination | • Rh (D) mother; weak D infant; management |
| • emergency transfusion; Rh incompatible | • Rh IG infusion in ITP; hemoglobin concentration |
| • Factor VIII deficiency; laboratory tests | • Rh IG; standard dose |
| • Factor IX deficiency; treatment of bleeding | • Rh typing; AHG anti-D testing |
| • febrile transfusion reaction; premedication | • selection of compatible units |
| • fetal-maternal transfusion; RBC incompatibility | • serum neutralization with Le(a) and Le(b) |
| • FFP separation and storage | • sickle cell disease crisis; treatment |
| • FFP; indications | • sickle cell disease; hyperhemolytic syndrome |
| • FFP; prophylactic use | • solvent-detergent viral inactivation |
| • frozen RBCs; expiration | • therapeutic apheresis for drug removal; pharmacokinetics |
| • frozen RBCs; reuse | • therapeutic apheresis; acute graft versus host disease |
| • graft-vs-host risk; HLA | • therapeutic apheresis; volume removed |
| • hemolytic disease of the fetus/newborn risk; maternal & paternal Rh types | • therapeutic plasma exchange; TTP |
| • hemolytic disease of the fetus/newborn; alloantibodies | • TRALI |
| • hemolytic disease of the fetus/newborn; Doppler ultrasound | • TRALI; CBC |
| • hemolytic disease of the fetus/newborn; not Rh; not ABO | • TRALI; prevention |
| • hemolytic transfusion reaction; passive antibodies | • transfusion associated GVHD vs. allogeneic HPC transplant associated GVHD |
| • hemolytic transfusion reaction; prevention | • transfusion induced iron overload; chelation therapy |
| • hemolytic transfusion reaction; treatment | • transfusion of units with broken seal |
| • hemolytic transfusion reactions | • transfusion trigger; coronary artery disease |
| • HTLV transmission risk | • transfusion-associated circulatory overload |
| • hydrops fetalis; alloantibodies | • transfusion-related fatality reporting |
| • hypoproliferative thrombocytopenia; GI bleeding | • transfusion-transmitted infections; intravascular hemolysis |
| • incompatible crossmatch; emergency transfusion | • trauma; group O transfusion |
| • indications for irradiation of blood components | • unexpected antibodies; gel technology |
| • individual classified as Rh positive donor/Rh negative recipient | • unexpected antibody screening cells; reagent Rh phenotypes |
| • intraoperative salvage standards | • universal leukocyte reduction; impact |
| • irradiation; storage of blood products | • urgent warfarin reversal |
| • ISBT 128 | • West Nile Virus; NAT testing |
| • ITP; indications for platelet transfusions | • whole blood collection; AABB standards |