Atlantic Health System

Blood Transfusion Review Criteria (Adult)

These considerations are educational to guide appropriate blood product utilization and should not replace clinical judgement.

Red Blood Cells

1. Anemia not responding to other therapy with Hgb < 7 g/dL or Hct < 21% without cardiovascular disease or <8 g/dL with cardiovascular disease
2. Symptomatic Anemia
3. Anemia of Chronic Disease with Hgb < 8 g/dL
4. Hgb < 10 g/dL in a patient on a chronic transfusion regimen (e.g. Sickle cell disease, *B* Thalassemia)
5. Cancer patient on radiotherapy or chemotherapy with Hgb < 10 g/dL
6. Acute blood loss, clinically significant
7. Pre-op Hgb < 7 g/dL

Platelets – Single Donor (equivalent to 6-8 random donor platelets ~ 3×10^{11} platelet/unit)

1. Platelet count < 20,000/uL
2. Platelet count < 50,000/uL with impending surgery or invasive procedure
3. Platelet count < 100,000/uL with
   A) Significant bleeding & decreasing platelet count
   B) Disseminated Intravascular Coagulation (DIC)/ Coagulation Abnormalities
   C) Patient undergoing major surgery
   D) Severe infection
4. Known or confirmed Platelet Dysfunction regardless of the platelet count

Fresh Frozen Plasma (Thawed)

1. Active bleeding with INR > 1.6 or PTT > 48 seconds
2. Preoperative patient with INR > 1.6 or PTT > 48 seconds
3. Active bleeding with liver disease, coagulation deficiencies or DIC
4. Replacement therapy in therapeutic plasma exchange: Diagnosis of TTP
5. Deficiency of protein C, protein S, or Antithrombin III when specific product is not available

Cryoprecipitate (Adult dose of 5 units pooled contains approximately 750 mg of Fibrinogen)

1. Dysfibrinogenemia or Hypofibrinogenemia
2. Fibrinogen level <200 mg/dL in pregnant patients
3. Fibrinogen level < 100 mg/dL in non-pregnant patients
4. Von Willebrand Disease
5. Uremic bleeding
6. Factor VIII deficiency

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Supplementary Information

Potential Uses for Special Blood Product Preparations

CMV Negative

1. Seronegative Stem Cell Donor-Recipient Pairs/Recipient Candidates
2. Seronegative Oncology Patients receiving
   a. Myeloablative regimens before stem cell transplantation
   b. Nucleoside analogs
3. Seronegative solid organ transplant recipients/ candidates
4. Neonate
5. Seronegative patients living w/ HIV / AIDS

Irradiation

1. Bone Marrow/ Stem Cell / Solid Organ Transplant Recipients
2. Leukemias/Lymphomas
3. Plasma Cell Dyscrasia
4. HLA Matched/Crossmatched Platelets
5. Directed Donors from family members
6. Congenital Cellular Immunodeficiency Syndromes (e.g., SCID, DiGeorge)
7. Pediatric Solid Tumors (e.g., Wilm's Tumor, Neuroblastoma)
8. Neonates
9. Intrauterine Transfusions/Neonatal Exchange Transfusions/Neonatal ECMO

Sickle Cell Negative Red Blood Cells

1. Sickle cell disease
2. Sickle cell trait
3. Neonates

Did you know that…

Patient outcomes are much better when following a restrictive transfusion strategy (Hgb < 7 g/dL or Hct < 21%)
99% of the red blood cells and platelets that are supplied by the Atlantic Health blood banks are leukoreduced.
A new type and screen sample is required every 72 hours.
It takes approximately 30 – 45 minutes to thaw fresh frozen plasma and cryoprecipitate.
Patients of all blood types require an ABO confirmation sample for red blood cell transfusions, if there is no previous history of blood typing in the blood bank.
The blood bank will call and let the nursing unit know when an ABO confirmation sample is required.

Autologous and directed donations can be ordered by contacting the donor services at (973) 971-5621

Answers for Transfusion related questions can be obtained by calling:

Morristown	**(973) 971–5271**
Overlook	**(908) 522-2313**
Newton	**(973) 579-8715**
Chilton	**(973) 831-5006**
Hackettstown	**(908) 850-6890**