Available Components

Further information is available by contacting the Medical Director of the Transfusion Medicine Service: Zbigniew M. Szczepiorkowski, M.D. or the Blood Bank Medical Director, Nancy M. Dunbar M.D.

The following blood components are routinely stocked by the Blood Bank:

For additional details please refer to the Circular of Information for the use of Human Blood and Blood Components, published jointly by the Associated for the Advancement of Blood and Biotherapies (AABB), America's Blood Centers, and the American Red Cross. Copies of this pamphlet may be obtained by calling Blood Bank (5-7207).

Blood Components and Derivatives

Red Blood Cells:

- These units are either derived from donation of whole blood or apheresis.
- The hematocrit is usually between 55-65 %.

Plasma:

- Dose is weight based; Adult doses are typically 3-5 units.

Platelets:

- Platelets collected by apheresis are the standard form of platelet utilized at this center. They contain the equivalent of at least 6 units of platelet concentrates derived from whole blood donations.
- Most platelets are suspended in approximately 300 mL (i.e., one "unit") of plasma; a portion are suspended in platelet additive solution (PAS) which replaces 655 of the plasma.
- An adult patient would be expected to experience a platelet count increment of approximately 10-20,000 from a single transfusion.
- Patients refractory to platelet transfusions can be investigated by the Transfusion Medicine Service upon request to further to ensure provision of compatible platelets.

Cryoprecipitate:

- Dose is weight based; Adult dose is 2pools.

Rho(D) Immune Globulin:

- The standard (300 microgram) dose is available.
- Evaluation of candidacy and responsibility for ordering this product remains that of the attending Health Care Practitioner.

Component Modifications

Leukocyte-reduction:

- Prior to storage, cellular components (RBCs, platelets) are filtered to remove white blood cells.
- Leukocyte reduction reduces risk of febrile reactions, HLA alloimmunization, and CMV infection.

- A "regular" 170 micron filter (blood administration set) should still be used at transfusion for all blood components, including leukoreduced red cells and platelets.
- **ALL CELLULAR COMPONENTS ARE PRE-STORAGE LEUKOCYTE REDUCED AT DHMC.**

CMV risk reduced:

- Leukocyte reduction is the method used for reducing the risk of CMV infection transmission in susceptible patients at DHMC.

Irradiation:

- X-ray irradiation of cellular components (RBCs, platelets) is used to prevent donor lymphocyte proliferation following transfusion and preventing the development of transfusion related graft versus host disease.
- **ALL CELLULAR COMPONENTS ARE IRRADIATED AT DHMC.**