Informed of bleeding risk. I have been advised that the intended procedure ________________________________ or medical diagnosis of ________________________________ involves a risk of bleeding. I have been advised that standard medical management may include the need to administer blood components or blood derivatives during this hospitalization for the procedure on ________________________________, 20___ (date).

Transfusion: Results, Benefits, Risks, Alternatives Explained. I acknowledge that Dr. __________________ (“my physician”) explained to me anticipated results and benefits of a blood transfusion. I have also been told refusal of a transfusion may result in serious impairment of my health, permanent injury and death. I understand the potential risks of a blood transfusion include risk of allergic reaction, fever, hives, volume overload and in rare circumstances more severe reactions and/or infectious diseases such as hepatitis and HIV/AIDS. I understand the precautions taken by the transfusion service in screening donors and in matching blood for transfusion which minimizes but does not eliminate those risks. The alternative treatment of non-blood management has been explained to me, as well as the risks and benefits of alternative treatment.

Initial below as applicable

_________ I have an Advance Directive/Durable Power of Attorney that addresses the use of blood in my care and a copy has been provided.

_________ I do NOT have an Advance Directive/Durable Power of Attorney that addresses the use of blood in my care

_________ Blood Transfusion Refusal. I refuse transfusion of all blood components (whole blood, red blood cells, plasma, platelets, white blood cells), including those collected from me (autologous), even though in the opinion of my physician such treatment may be necessary to preserve life or promote recovery.

_________ Consent to Non-Blood Medical Management (definitions attached). I consent to non-blood medical management during this hospitalization. As part of this consent I accept volume expanders such as crystalloids (including sodium chloride, lactated Ringer’s, and Normosol) and synthetic colloids (including Dextran, Hetastarch, Haemacell and Gelofusine). My physician explained to me the anticipated results, benefits and risks of this decision and the alternative treatment. I also instruct the healthcare team to comply with the following directives (initial):

I _______ Refuse _______ Accept Cryoprecipitate (dry-cryo) suspended in normal saline

I _______ Refuse _______ Accept coagulation factor concentrates

I _______ Refuse _______ Accept Albumin

I _______ Refuse _______ Accept Erythropoiesis-Stimulating Agents with Albumin: Epoetin alfa (Procrit, Epogen)

I _______ Refuse _______ Accept tissue adhesives

I _______ Refuse _______ Accept Immunoglobulins or Immune Globulins (including gamma globulin)

I _______ Refuse _______ Accept cell saver (cell salvage)

I _______ Refuse _______ Accept dialysis and heart-lung machine (non-blood primed)

I _______ Refuse _______ Accept an epidural blood patch

I _______ Refuse _______ Accept autologous blood

I _______ Refuse _______ Accept granulocyte colony stimulating factor (G-CSF)

I have read and fully understand the content of the above consent and voluntarily execute it. (Note: this consent is valid for this hospitalization only. I have had an opportunity to have all my questions answered. I understand the consequences due to my choices may adversely affect my health and could result in death. I release my physician, ______________________________ (organization), and its employees, officers, directors and agents from any and all responsibility and liability arising or resulting from my decisions as described in this consent.

__________________________________________
Patient signature (or legal representative) Date/Time

__________________________________________
Patient name printed (and legal relationship if other than patient)

__________________________________________
Witness to patient signature Date/Time

__________________________________________
Witness name printed

__________________________________________
Physician signature attesting to informed consent process Date/Time
Albumin (Human):

- Protein obtained by fractionating plasma (makes up approximately 4% of plasma volume). Produced in the liver.
- Common use: maintain or restore blood volume; used in drug preparations such as erythropoietin (Procrit®) to bind and transport medications in the body. Used in growth medium for vaccine medications (e.g. Meruvax II, Attenus – rubella and measles vaccines).

Coagulation factor concentrates:

- Any of the factors in the blood whose actions are essential for blood coagulation
- Clotting factors make up approximately 1% of plasma. Derived from human plasma, animal or recombinant (synthetic).
- Examples of factor products: fibrin glues, Factor II, Factor VIIa (Novo Seven); Factor VIII, Factor IX.
- Common Use: preparation for an invasive procedure or bleeding patients; Hemophilia & von Willebrand disease are common disorders where these factors may be used; may be used in tissue sealant preparations e.g., Tisseel.

Cryoprecipitate in saline:

- Cryo is a concentration of clotting factors derived from plasma, and suspended in saline. Requires a special order from PSBC. Common use: Preparation for an invasive procedure in a patient with low fibrinogen or bleeding patient with low fibrinogen.

Erythropoietic Stimulating Agents (ESA) with Albumin: Epoetin alfa (Procrit, Epogen) and Darbepoetin alfa (Aranesp)

- Synthetic proteins that stimulate red blood cell production.
- Darbepoetin alfa is the long acting form.

Granulocyte colony stimulating factor (G-CSF):

- G-CSF stimulates production of white blood cells.

Immunoglobulins or Immune Globulins (including gamma globulin):

- Proteins produced by white cells in response to infection, making up approximately 3% of plasma. Fractionated from pooled blood plasma. Some are available as recombinant (synthetic) products.
- Common Use:
  - Vaccinations: tetanus, rabies, measles and mumps, Hepatitis A and B, rubella and polio, DTP, RhoGAM
  - Treatment of diseases: Cytomegalovirus infections (CMV), Kawasaki disease, Thrombocytopenic Purpura, diphtheria, treatment of most snake or spider bites.

Non-blood volume expanders:

- Pharmaceutical sterile fluids that are administered intravenously and are made with water, salts, sugars or starch that help maintain the correct amount of fluid in the blood vessels (e.g. lactated Ringer’s, sodium chloride, and Normosol).

Tissue adhesives:

- The mixture, made from fibrinogen and thrombin mixed with the drug aprotinin, may be painted or sprayed on organ(s) losing blood during surgery to stop or slow blood loss.
- Common use: tissue sealant preparations, e.g. Tisseel; preparation for an invasive procedure or bleeding patients.
Acute Normovolemic Hemodilution (ANH)

- A predetermined amount of blood is withdrawn from the patient immediately after induction of anesthesia. The blood is kept in the operating room and no preservatives are added. The volume is replaced with an IV solution. Actual blood volume loss during surgery is less due to dilution of the intravascular blood volume.
- The blood drawn off into a bag through IV tubing that is never disconnected from the patient thereby maintaining a continuous circuit from the removed blood to the body.
- The reserved blood must be returned to the patient’s circulatory system within 8 hours or be discarded. The reserved blood may be infused during the surgery or in the recovery room.

Blood Salvage/Cell Salvage (including drains)

- Intra-operatively: Blood that enters the surgical field or wound is collected, filtered, and/or washed, the red cells are returned to the patient either in the operating room or the recovery rooms. Since the blood is removed by a hand held suction catheter there is not a continuous circuit from the blood to the body.
- Post-operatively: a drain is inserted to salvage blood draining from the surgical site (common in orthopedic surgeries). This blood can be filtered and returned to the patient within 4-6 hours; this blood is re-infused in the patient room.

Cell Tagging or Labeling

- This diagnostic procedure requires the removal of a very small amount of the patient’s blood, approximately 3ml. Radioisotopes are added to the sample. This mixture is re-injected into the patient. This procedure may be used to determine the location of bleeding.

Dialysis/Hemodialysis

- Patient’s blood is cleaned by diverting it through the dialysis machine. Waste is drawn off and the blood is returned to the patient; machine serves as substitute kidney.

Epidural Blood Patch

- Treatment for a spinal headache usually as a result of epidural injection. A small amount of patient blood is removed through an IV into a syringe and then immediately injected into the patient’s back (spinal column area) to help repair a leak in the membrane surrounding the spinal column.

Heart-Lung Bypass

- Blood is circulating through a machine that functions as the heart and lungs during surgery. Patient’s blood is returned at the end of the case.