GUIDANCE DOCUMENT
Patients Who Decline Blood Products

NOTE:

The progression of care from observation/fluid replacement to mechanical hemostasis (e.g., intrauterine compression balloon) to hysterectomy must occur faster in patients who decline blood products than in those who can be transfused.

Since blood replacement is not possible, achieving hemostasis in the most efficient and rapid manner is absolutely critical.

• In cases of significant ongoing bleeding, consider involving a 2nd MD.
• In cases of suspected intra-abdominal bleeding, include imaging studies as part of the initial (immediate) evaluation. Return the patient to the OR without delay if these studies suggest intra-abdominal bleeding.
• Do not delay definitive surgical intervention pending correction of coagulopathy or hemodynamic parameters (e.g., BP, pulse, urine output)

A. IN THE OFFICE

ANTEPARTUM DISCUSSIONS AND DOCUMENTATION:

1) Screen all patients regarding potential to refuse some/all blood products
2) Discuss and document the risks of hemorrhage and the increased risk of death and morbidity
3) Discuss possibility of additional surgery, including hysterectomy, in the event of a PPH
4) Privately discuss patient’s refusal of blood products (without family members) to understand patient’s autonomous decisions in the event of a PPH
5) Present and complete the blood product form/list (see list at end of this document)
6) Complete a health care proxy form. This should be completed with a health care agent designated, clarifying the agent’s ability to make decisions regarding blood products if the patient’s capacity is lost due to anesthesia or hypotension/shock.
7) Send the documents and documented discussions to the delivering hospital

ANTEPARTUM PREPARATION:

1) Maximize Hb/Hct
   a) Iron, folic acid
   b) For low Hb/Hct consider hematology consult and/or:
      Erythropoietin (40,000u/wk, increases seen >3-4wks or 20,000u/day for faster response)
2) Obtain further consultations (as appropriate):
   a) MFM
   b) Anesthesia
3) Identify hemorrhage risk factors and consider delivery at hospital with higher level of surgical/intensive care based on risks of severe hemorrhage
B. IN THE HOSPITAL

LABOR & DELIVERY ADMISSION (REFER TO THE ANTEPARTUM DISCUSSION FOR DETAILS):

1) On admission, identify all patients who refuse blood products
2) If blood product form is not available, complete this form now
3) Alert rest of the team (OB attending, anesthesia)
4) Identify risk factors for hemorrhage. Should the patient have significant risks, consider:
   a) Alerting the hemorrhage team (outlined in SMI hemorrhage slide deck)
   b) Prophylactic administration of tranexamic acid (1g/10min) immediately prior to delivery
   c) Normovolemic hemodilution (if acceptable to patient, consider closed systems)
   d) Transferring to a facility with a higher level of surgical/intensive care
**Blood Product Acceptance List**

**Patient ID: __________________**

My signature below indicates that I request no blood derivatives other than the ones which I have designated in this consent to be administered to me during my hospitalization.

My attending physician, ___________________________ MD has reviewed and fully explained to me the risks and benefits of the following blood products and methods for alternative non-blood medical management and blood conservation available to me.

My attending physician, ___________________________ MD has also fully explained to me the potential risk associated with not authorizing blood or non-blood management during my hospitalization.

### Category I
- Red Blood Cells
- Fresh Frozen Plasma
- Platelets
- Autologous Banked Blood
- Cryoprecipitate

### Category II (Contains Human Plasma)
- Albumin
- Fibrin Glue
- Fibrinogen Concentrate (RiaSTAP)
- RhoGAM
- Plasma Protein Fractions/Plasmanate
- Human Immunoglobulin
- Factor 8/vWF Concentrate (Humate-P and Wilate)
- Prothrombin Complex Concentrate
- Bebulin (3 Factors)
- Kcentra (4 Factors)

### Category II (Does Not Contain Human Plasma)
- Factor 7A (Novo 7)
- Factor 8 Recombinant
- Factor 9 Recombinant
- Factor 13 Recombinant (Treten)

### Category III (No Blood Component)
- Tranexamic Acid
- Amicar
- DDAVP
- Erythropoietin - recombinant
- Hetastarch
- Balanced Salt Solutions

### Category IV
- Isovolemic Hemodilution
- Hypervolemic Hemodilution
- Cell Saver

**Signature: ___________________________ Date: _____________ Time: _____________**
## Blood Product Education Form

<table>
<thead>
<tr>
<th>Where to Order</th>
<th>Component</th>
<th>Content</th>
<th>Expected Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Bank</td>
<td>Packed Red Blood Cells</td>
<td>Contains red blood cells and a small amount of plasma</td>
<td>250 ml: Increases hematocrit by 3-4% and hemoglobin by 1 g/dl</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Fresh Frozen Plasma (FFP)</td>
<td>Plasma which contains clotting factors, albumin and immunoglobulins</td>
<td>250 ml: Increases fibrinogen, normalization of PT, PTT</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Platelets</td>
<td>Platelets and plasma</td>
<td>250 ml: Increases platelets</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Autologous Blood</td>
<td>Donated by patient for self-use</td>
<td>Need a high/normal hematocrit and usually is not used in emergencies</td>
</tr>
</tbody>
</table>

### Minor Blood Fractions

<table>
<thead>
<tr>
<th>Component</th>
<th>Content</th>
<th>Expected Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Bank</td>
<td>Albumin</td>
<td>A protein in human serum, highly processed/treated plasma derivative</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Factor VII NovoSeven</td>
<td>Concentrated preparation of clotting factor VII</td>
</tr>
<tr>
<td>OR</td>
<td>Fibrin Glue</td>
<td>Fibrinogen and thrombin</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Erythropoietin</td>
<td>A hormone produced in the kidney; may contain albumin.</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>RhoGAM</td>
<td>Medicine containing antibodies</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Human Immunglobulin</td>
<td>Human protein antibodies</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Cryoprecipitate</td>
<td>Fibrinogen, Factors VIII, vWF, XIII, Fibronectin</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Humate-P (VWF/F VIII)</td>
<td>Protein factors; vWF, Factor VIII – human derived</td>
</tr>
<tr>
<td>Blood Bank</td>
<td>Prothrombin Complex Concentrate</td>
<td>Blood clotting factors II, VII, IX, X, and protein C and S; human derived</td>
</tr>
</tbody>
</table>

### No Blood Component

<table>
<thead>
<tr>
<th>Component</th>
<th>Content</th>
<th>Expected Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>Tranexamic Acid</td>
<td>Antifibrinolytic</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Amicar</td>
<td>Derivative amino acid lysine; antifibrinolytic</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Hetastarch</td>
<td>Non-ionic starch derivative</td>
</tr>
</tbody>
</table>

### Category IV

<table>
<thead>
<tr>
<th>Component</th>
<th>Content</th>
<th>Expected Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiology</td>
<td>Isovolemic Hemodilution</td>
<td>Autologous blood removed from patient</td>
</tr>
<tr>
<td></td>
<td>Hypervolemic Hemodilution</td>
<td>Administering a large volume of fluid before surgery so that when you lose volume during surgery you lose fewer RBCs</td>
</tr>
<tr>
<td></td>
<td>Cell Saver – closed circuit</td>
<td>Autologous blood – Blood lost during procedure</td>
</tr>
</tbody>
</table>