Transfusion Reaction Algorithm

Note: Consult Transfusion Medicine MD on call if replacement blood products are required urgently.

Additional resources:
www.bestbloodmanitoba.ca

Version 3 (Oct 2018)
For all Suspected Major Transfusion Reactions

- Return product to blood bank STAT. Ensure tubing attached and all clamps closed.
- Send a type and screen following usual protocol
- Notify health care provider who ordered blood product of the transfusion reaction
- Complete the "Transfusion Reaction Investigation Form" CM105 and send to the blood bank

### Signs and Symptoms

- Temperature rises to greater than 39°C
  - or
- Temperature rise not responding to antipyretics
  - or
- Temperature 38°C to 39°C and Chills/Rigors or Hypotension/Shock or Tachycardia or Severe Respiratory distress
  - or
- Suspicion of sepsis in absence of fever

### Recommended Investigation / Actions

- Draw Blood Cultures from patient
- If bacterial contamination suspected, antibiotics should strongly be considered
- Monitor patient for signs and symptoms of shock

#### Required Blood for Blood Cultures - Reference Guide

<table>
<thead>
<tr>
<th>Adults</th>
<th>Pediatrics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume</strong></td>
<td><strong>Site</strong></td>
</tr>
<tr>
<td>50ml</td>
<td>peripheral</td>
</tr>
<tr>
<td>50ml</td>
<td>peripheral</td>
</tr>
<tr>
<td>50ml</td>
<td>second peripheral site</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Rash or urticaria accompanied by any major symptom
- Chest x-ray if dyspneic
- Monitor for shock, epinephrine may be required

- Severe hypertension associated with hypoxemia and severe respiratory distress, signs of fluid overload
- Consider a chest x-ray
- Monitor SpO2
- Patient may require oxygen and diuretics

- Severe hypotension associated with hypoxemia and severe respiratory distress
- Consider hemolytic or DIC (Disseminated Intravascular coagulation) work up
- Chest x-ray if dyspneic
- Consider bacterial sepsis or allergic reaction work up

If TRALI (Transfusion Related Acute Lung Injury) is suspected the physician treating the patient must contact the TM physician on call and complete the "TRALI Patient Data Form"