ADULT BLOOD TRANSFUSION INTEGRATED CARE PATHWAY

Hospital: [Space for Hospital Name]  Ward/Dept: [Space for Department Name]  Consultant: [Space for Consultant Name]

THE FOLLOWING MUST BE CHECKED BY THE INDIVIDUAL ADMINISTERING THE TRANSFUSION:

Has informed consent been obtained and documented?  
Yes □  Date __ __ __

This patient is unable to give consent.  
□

Signature of prescribing clinician:  
______________________________

The clinician feels that blood transfusion is in the patient's best interest.  
Yes □  No □

Information leaflet given?  
Yes □  No □

For Bedside Administration, once you have confirmed positive patient identification and performed all blood component checks, you must use Bloodtrack Tx.

For Positive Patient Identification (PPI) you must ask the patient to state their full name and date of birth (whenever possible) and confirm this against the patient's ID band.

The expiry date of each unit for transfusion must be checked before administration.

Patient's weight:  ___kg

GIVING SETS MUST BE CHANGED AFTER 2 UNITS, OR 8 HOURS IF RAPIDLY TRANSFUSING MULTIPLE UNITS

BLOOD COMPONENTS MUST NOT BE MIXED WITH ANY OTHER SUBSTANCES, E.G. DRUGS, IV FLUIDS ETC
### BLOOD COMPONENT PRESCRIPTION & ADMINISTRATION CHART

Note: Some patients will require CMV negative and/or irradiated blood components. PLEASE SEE OVERLEAF.

Before administering a blood component it is vital for the safety of your patient to ensure that the special requirements section overleaf is fully completed. DO NOT PROCEED WITHOUT FIRST CHECKING THIS INFORMATION.

**PRE-TRANSFUSION CHECKLIST:**

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<td>Written consent has been obtained (as appropriate)</td>
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<td>Positive Patient Identification confirmed against the Patient ID band</td>
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**PRESCRIPTION**

<table>
<thead>
<tr>
<th>Date of Transfusion</th>
<th>Blood Component Type (e.g. red cells, platelets etc.)</th>
<th>Dose / Volume</th>
<th>Special Requirements</th>
<th>Rate of Infusion</th>
<th>Diuretic required (Prescribed on Patient's drug chart)</th>
<th>Doctor (Sign &amp; Print Name)</th>
<th>Date blood component actually transfused</th>
<th>Donation number of unit (i.e. G092....)</th>
<th>Administered by: (Sign &amp; Print Name)</th>
<th>Checked by: (Sign &amp; Print Name)</th>
<th>Time started</th>
<th>Time finished</th>
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In the event that BloodTrack Tx is not operational, a second signature and time must be recorded here.

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All blood components must be administered via a 'blood giving set' and all transfusions must be completed within 4 hours of leaving controlled storage.
INFORMED CONSENT FOR BLOOD TRANSFUSION
(RED CELLS, PLATELETS, FFP OR CRYO)

STEP BY STEP GUIDE ON HOW TO OBTAIN WRITTEN CONSENT FOR BLOOD TRANSFUSION:

1) If a patient needs, or is likely to need Blood Transfusion, informed written consent should be obtained where possible (see detailed guidance notes available on INsite).

2) Use the UHL standard consent form.

3) Explain the reasons, benefits and risks of proposed Blood Transfusion to the patient, and offer written information leaflet on Blood Transfusion. The following text may be used for this purpose:

"I / we feel that it is, or it may become, necessary for you / your child to receive a Blood Transfusion. Although Blood Transfusion is quite safe, there are some potential risks associated with this treatment. In the UK the risk of contracting a viral infection such as hepatitis or HIV from Blood Transfusion is extremely small. Very rarely patients receiving Blood Transfusion may experience an allergic reaction or develop other complications such as haemolysis (breakdown of red cells in your blood) or a bacterial infection. The actual risk of contracting vCJD through blood is unknown but is likely to be extremely small. There is also a very small risk of receiving ‘unsuitable’ blood, however there are stringent procedures in place to minimise this risk."

In some cases, particularly for surgical patients, there may be suitable alternatives to offering donor blood. Please discuss this with your senior colleagues or a member of the Blood Transfusion team.

4) Use the peel off stickers at the bottom of this page. Tick all boxes to indicate that the listed benefits and possible risks have been explained to the patient. Affix one sticker to each copy of consent form, file the top copy in patient’s case notes and hand the bottom copy to the patient.

5) Consent for haematology and medical patients:
   • Patients requiring regular transfusion support will only need to be consented once, at the beginning of regular transfusion programme.
   • All other patients who are likely to require occasional transfusions should be consented once during each admission episode.

6) Consent for surgical procedures:
   • Patients undergoing Planned Surgical Procedures which require “Group and Save” or Cross Match (see Optimal Surgical Blood Ordering Schedule – available on INsite document ID 56978 should be consented for Blood Transfusion at the same time as the consent is taken for the surgical procedure.
   • Patients undergoing Emergency Surgery:
     Obtain written consent if time allows, otherwise obtain and document verbal consent if patient is able to give consent.

7) Emergency transfusion in an unconscious patient, or if the patient is otherwise unable to give informed consent – the clinician in charge will decide what is in the best interest of the patient and document in case notes – remember, the issue of informed consent for Blood Transfusion is no different to any other emergency treatment or intervention.
### Special Requirements

This section **MUST** be completed prior to the prescribing of all blood components.

#### Indication Checklist – tick box if indication applies ✓

<table>
<thead>
<tr>
<th>Indications for CMV NEGATIVE Blood Components</th>
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<tbody>
<tr>
<td>Neonates (i.e. up to 28 days post <em>ESTIMATED</em> delivery date)</td>
<td>Yes (Tick)</td>
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<tr>
<td>CMV antibody negative patients with haematological or other disease who are likely to receive allogeneic bone marrow transplant (BMT) and/or peripheral blood stem cell transplant (PBSCT)</td>
<td></td>
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<tr>
<td>CMV negative recipients of allogeneic bone marrow transplant and/or peripheral blood stem cell transplant</td>
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<tr>
<td>Elective transfusions during the course of pregnancy (not labour and/or post delivery)</td>
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<tr>
<td>All intra-uterine transfusions</td>
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</table>

<table>
<thead>
<tr>
<th>Indications for IRRADIATED Blood Components</th>
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<tbody>
<tr>
<td>BMT/PBSCT allograft recipient</td>
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<tr>
<td>BMT/PBSCT autograft recipient - no Total Body Irradiation (TBI) &lt;3 months post transplant</td>
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<tr>
<td>Autograft recipient with TBI conditioning &lt;6 months post transplant</td>
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<tr>
<td>Due for BMT or PBSCT in the next seven days</td>
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<tr>
<td>Hodgkin's Disease (all patients regardless of stage)</td>
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<tr>
<td>Suspected or confirmed congenital cellular immune deficiency state (eg. DiGeorge Syndrome)</td>
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<tr>
<td>Neonate (&lt;6 months old) due to receive a red cell exchange transfusion</td>
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<tr>
<td>Patients receiving Fludarabine, Cladribine (2CDA), Pentostatin (2 deoxycoformycin), Bendamustine, CAMPATH, Clofarabine, ATG (not essential following ATG in recipients of solid organ transplant)</td>
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<tr>
<td>Due to receive or has previously received intra-uterine transfusion</td>
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<tr>
<td>Due to receive Granulocytes, HLA-matched platelets or donations from 1st or 2nd degree relatives</td>
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</table>

If no Special Requirements apply, please tick this box □

| Signature: | Date: |

Comments

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Reviewed

| Signature: | Date: |

Please see the hospital transfusion policy for further background detail.

Adapted from Northampton General Hospital SR Form
Management of Transfusion Reaction

**Symptoms/Signs of Acute Transfusion Reaction**
- Fever, chills, tachycardia, hyper or hypotension, collapse, rigors, flushing, urticaria, bone, muscle, chest and/or abdominal pain, shortness of breath, nausea, generally feeling unwell, respiratory distress

**Stop the Transfusion and call a Doctor**
- Maintain IV access with appropriate slow-running IV fluids.
- Measure temperature, pulse, BP, respiratory rate, Oxygen saturation.
- Check the identity of the recipient, the details on the unit and crossmatch report form

**Febrile non-haemolytic transfusion reaction**
- If temp rises less than 1.5°C, the observations are stable and the patient is otherwise well, give Paracetamol, if appropriate.
- Restart infusion at slower rate and take more frequent clinical observations.

**ABO Incompatibility**
- Take down unit and giving set
- Commence I.V. saline infusion
- Inform Hospital Transfusion Department immediately
- Monitor urine output/catherise
- Maintain urine output at ≥100 ml/hr
- Give furosemide if urine output falling in consultation with a renal registrar
- Treat any DIC with appropriate blood components
- Return the bag along with the giving set to blood bank
- Seek Haematological advice

**Haemolytic reaction/bacterial infection of unit**
- Disconnect giving set from cannula and return bag with the giving set to blood bank with all other used/unused units
- Take blood cultures, repeat blood group/crossmatch/FBC, coag screen, Biochemistry, urinalysis
- Monitor urine output
- Commence broad spectrum antibiotics if suspected bacterial infection
- Commence oxygen and fluid support

**Fluid overload**
- **Acute LVF**
  - STOP INFUSION
  - Give Oxygen & Frusemide 40-80mg IV
- **Not LVF**

**Stop the transfusion and call a Doctor**
- Give Chlorphenamine 10mg slowly IV
- (note this is adult dose) and
- restart the transfusion at a slower rate and observe more frequently

**Mild Allergic reaction**
- Bronchospasm, angioedema, abdominal pain, hypotension
- Discontinue transfusion
- Return to blood bank the blood pack with attached giving set along with all other units
- Give Chlorphenamine 10mg slow IV (adult dose)
- Commence oxygen
- Give nebulised salbutamol (2.5 to 5mg, adult dose)
- If severe reaction, give adrenaline 0.5mg (0.5mls of 1 in 1000 solution, adult dose) IM
- Repeat IM dose after 5 minutes, if necessary
- If severe hypotension, give adrenaline 0.5mg (5mls of dilute, 1 in 10,000, adult dose) slow IV (1ml per minute, stopping when response obtained)
- Send 10mls clotted sample to blood bank
- Use saline washed blood components in future

**Severe Allergic reaction**
- **YES**
  - Suspected ABO incompatibility?
  - Recheck pack & patient ID
- **NO**

**Severe hypotension/ anaphylactic reaction**
- Monitor Blood gases
- Perform CXR
- Measure CVP/Pulmonary capillary pressure

**Acute dyspnoea/hypotension**
- Monitor Blood gases
- Perform CXR
- Measure CVP/Pulmonary capillary pressure

**Transfusion Related Acute Lung Injury (TRALI)**
- Dyspnoea, chest X-ray, "whiteout"
- Discontinue transfusion
- Give 100% Oxygen
- Treat as ARDS
- Ventilate if hypoxia indicates
Transfusion observations should be recorded in the Transfusion module or e-Ob's. In the event that e-Ob's is not available, record observations on this chart.

Please record the TIME at which you carry out each set of observations.

Observations must be recorded for each unit transfused. Prior to starting the transfusion (before the blood is collected from blood bank), then at 20 mins, 1 hour, and on completion of each unit.
### CONSENT FOR BLOOD TRANSFUSION

**Benefits**

1. To treat anaemia/improve delivery of oxygen to tissues
2. To replace blood loss (bleeding/haemolysis)
3. To help prevent further bleeding

**Potential Risks**

1. Extremely small risk of viral illness such as hepatitis or HIV or other viruses
2. Very small risk of bacterial infection
3. Risk of transfusion reaction – allergic or haemolytic
4. Unknown but probably extremely small risk of vCJD
5. Very small risk of receiving unsuitable blood (though procedures in place to prevent this risk)
6. Alternative options to blood transfusion