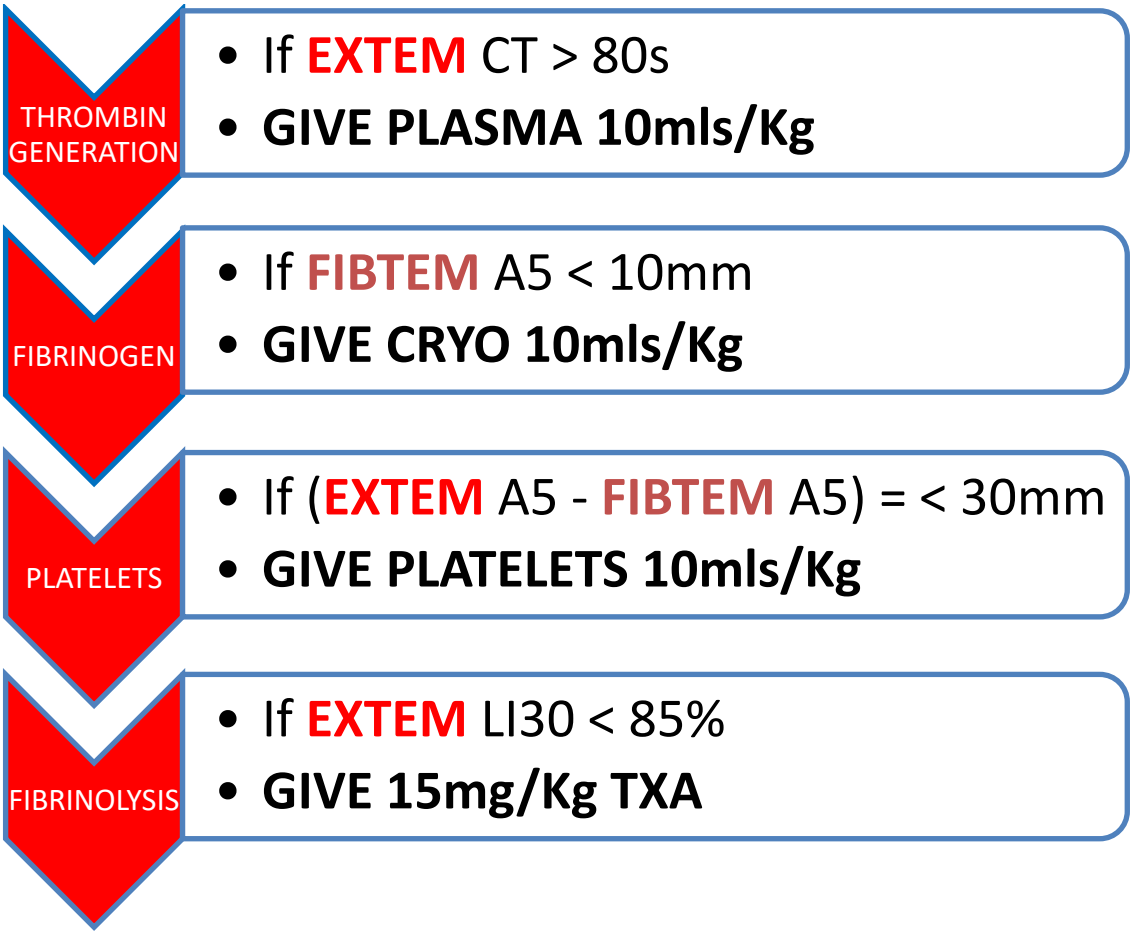
ROTEM Algorithm Paediatrics < 40 Kg



ROTEM repeatable 15 min after blood products to assess treatment response and to guide further therapy

AIMS OF TREATMENT

Systolic Age x 2 + 70 until bleeding controlled

pH > 7.35

Lactate < 2

Hb 70-90 g/l

Plts > 100 x 10^9/l

PT ratio < 1.5

APTT ratio < 1.5

Fib > 1.5 g/l

Ca^{2+} > 1mmol/l (ABG)

Temp > 36°C

Monitor K+

STAND DOWN

- Inform blood bank Ex
- Return all unused units directly back to Lab
- Record all donation numbers on transfusion documentation
- Debrief

Action Card 4: CLINICAL ACTION FOR PAEDIATRIC (<40Kg) HAEMORRHAGE		
Goal	**Procedure**	**Comments**
Activation	Ring #### and state Paediatric Emergency & Haemorrhage Phone Blood Bank Ex #### and give patient details, weight and nature of haemorrhage	
Access	Anaesthetist will gain access	
Request laboratory investigations	Lab: FBC, INR, APTT, fibrinogen, crossmatch, biochemical profile, glucose, POCT: Blood gas, ROTEM Ongoing: Repeat all bloods frequently to guide transfusion	Take samples at earliest opportunity. Blood bank samples are used for retrospective crossmatch. Patient misidentification is the commonest transfusion risk; ensure patient identification and immediate labeling of laboratory specimens
SHOCK PACK 1	2 x O negative red cells 2 x Group A HT- Fresh Frozen Plasma	These units are suitable for adults, but can be used in such emergency. Return any not required, based on child's weight, to blood fridge
Request suitable red cells	Request number of units based on child's weight Urgency dictates type of red cells.	**Immediate**: O Neg uncrossmatched (universal red cell donor) **10-15 min**: Group compatible (uncrossmatched) blood. Blood is retrospectively crossmatched.
Reassessment	Reassess clinical status Contact and Update KIDS	Definitive management based on reevaluation and KIDS advice and retrieval plans.
Request FFP	Give 10ml/kg based on APTT/INR > 1.5 and/or ROTEM results. Also indicated when there is diffuse microvascular bleeding.	Allow 20 minutes for thawing. All patients born after 1st January 1996 must receive MBFFP or SDFFP. WVT stocks Group AB Octaplas (SDFFP).
Request Cryoprecipitate	Automatically give 10mls/kg if fibrinogen <1.5 g/L Cryoprecipitate replaces fibrinogen and Factor VIII. Aim for fibrinogen >1.5g/L	Allow 20 minutes for thawing. Available in group O and A.
Request Platelets	Anticipate platelet count < 50 x 109/L after 2 x blood volume replacement. Aim for platelet count > 75 x 109/L or > 100 x 109/L in head trauma.	Use 1 platelet (40ml) or paediatric apheresis pack per 10kg. Use pool for patients > 30kg.
Reassessment Reassess clinical status	Contact and Update KIDS	Definitive management based on reevaluation and KIDS advice and retrieval plans.
General Keep the patient warm	Anticipate and treat hyperkalaemia and hypocalcaemia.	0.1ml/kg 10% calcium gluconate can be given to correct hypocalcaemia (do not mix with blood)
Suspect DIC	Treat underlying cause if possible. In the presence of DIC, more aggressive component therapy and frequent laboratory measurement is required.	Shock, hypothermia, acidosis increase the risk of DIC. Mortality from DIC is high.
Recombinant Factor VIIa (Novoseven)	Use of rFVIIa may be considered in patients where bleeding is uncontrolled by conventional therapy - use of this therapy **must be discussed with Consultant Haematologist**	A haemostatic effect has been demonstrated following the administration of rFVIIa (Novoseven) in a limited number of patients after trauma and bleeding. Optimal dose is not known and controlled studies are required to prove any beneficial effect and safety profile of rFVIIa in these patients.

Action Card 5: CLINICAL ACTION FOR OBSTETRIC HAEMORRHAGE

Blood Loss > 1500ml and on going (Measured or suspected)
OR Blood loss > 150ml/minute
OR Collapse / Shock

1 ACTIVATION

- Ring #### State **Obstetric Emergency and Haemorrhage**" and **Location**
- Ring Ex #### & give patient details
- Porter will collect **Shock Pack 1** (2x Plasma + 2x Red Cells). Give as clinical need

2 ACCESS

- Secure peripheral access
- **Give 1g TXA iv** (if not already given)
- Allocate roles

3 TAKE BLOODS & UTEROTONICS

- **Lab**: X match, Clotting, Fibrinogen, FBC, U&Es
- **POCT**: ROTEM, VBG for Lactate, iCa, Haemacue for Hb
- **AND SIMULTANEOULSY**
- Bi-manual compression +/- 1ml syntometrine IM
- Oxytocin infusion (40 units in 500ml Hartmans at 125ml/hr)
- Ergometrine 500µg IM
- Carboprost 250µg IM every 15 min – max 8 doses
- Misoprostol 1000µg rectally

4 TO THEATRE

- Consider intrauterine balloon tamponade, B-Lynch suture, stepwise ligation uterine vessels, uterine artery embolization*, hysterectomy (Call 2nd O&G Consultant)
- * *not currently available in at WVT*

MOVE TO GOAL DIRECTED THERAPY BASED ON ROTEM RESULTS
If severe ongoing bleeding BEFORE ROTEM available use SHOCK PACK 2

5 ONGOING BLEEDING

- Repeat Bloods, Recheck ROTEM
- **If severe on going bleeding use SHOCK PACK 2 (2 x Cryoprecitate, 2 x FFP, 2 x RCC)**

MOVE TO GOAL DIRECTED THERAPY BASED ON ROTEM RESULTS
If severe ongoing bleeding before ROTEM available use 2nd SHOCK PACK 2
Additional red cells may be required to be transfused based on clinical need

ROTEM Algorithm For Obstetrics

To be interpreted by Anaesthetist

FIBRINOGEN

- If **FIBTEM** A5 ≤ 10mm or Fibrinogen < 2g/l
- **GIVE 2 x POOLS CRYOPRECIPITATE**

THROMBIN GENERATION

- If **EXTEM** CT > 80s or elevated PT/APTT
- **GIVE 2 x FFP**

PLATELETS ACTIVATIO

- If (**EXTEM** A5 - **FIBTEM** A5) = < 30mm or Platelets ≤75 x 10^9/l
- **GIVE 1 x ADULT DOSE PLATELETS**

FIBRINOLYSIS

- If **EXTEM** LI30 < 85%
- **GIVE Ig TXA BOLUS**

- **If above normal, FOCUS ON OTHER CAUSES OF BLEEDING.**
  Patient is not presently coagulopathic

ROTEM repeatable 15 min after blood products to assess treatment response and to guide further therapy

AIMS OF TREATMENT

BP 100 systolic until definitive control

pH > 7.35

Lactate < 2

Hb > 70 -90g/l

Plts > 75 x 10^9/l

PT ratio < 1.5

APTT ratio < 1.5

Fib > 2.5 g/l

Ca^{2+} > 1mmol/l (ABG)

Temp > 36°C

Monitor K+

STAND DOWN

- Inform blood bank Ex 5711
- Return all unused units directly back to Lab
- Record all donation numbers on transfusion documentation
- Debrief

Action Card 5: CLINICAL ACTION FOR OBSTETRIC HAEMORRHAGE

Goal	Procedure	Comments
Assess patient **If MOH confirmed**	Peripheral perfusion Conscious level Blood pressure, Pulse Urine output	Warning signs - skin pallor, Cool peripheries Blood pressure < 90 systolic, Pulse > 100/minute Diminished level of consciousness Poor urine output, Low JVP/CVP
Contact key personnel	**Ring 2222 and state:** **OBSTETRIC EMERGENCY with HAEMORRHAGE**	Nominate a coordinator to have overall responsibility for organization, liaison communication and documentation ***Nominated Communications Officer must ring laboratory BMS directly to confirm patient details*** **Switchboard will contact:** Obstetric emergency team (Obstetric SpR and SHO, Obstetric anaesthetic middle grade/SHO, Delivery site co-ordinator, Porter, Theatre co-ordinator) CSM bleep ###/###Consultant Obstetrician & Anaesthetist (if requested) Team Leader Porter Laboratory BMS **###/Ex #### Consultant Haematologist Anaesthetist bleep ###
Restore circulating volume	Place patient flat or feet elevated, Give 15L/min oxygen by face mask. If patient has not delivered avoid aorto-caval compression by placing in left lateral position or tilt to left. Call for resuscitation trolley to be brought into patient's room. Site two large bore peripheral intravenous cannulae (eg 14G or 16G) Give Tranexamic acid - 1g by slow IV bolus over 10 minutes. This can be repeated every 8 hours or after the initial bolus injection a continuous IV infusion of 1g infusion over 8 hours can be considered.	Remember the external jugular vein if problems with venous access Set up central venous line if - peripheral veins poor, or prolonged resuscitation necessary. Consider IO access if venous access inadequate. Besides overt blood loss there may be concealed losses. Estimate and predict on-going risk and extent of blood loss. Blood loss of up to 1,000 mls is usually tolerated without physiological compromise. Estimation of blood loss will usually be an under-estimate. Double the volume of any clots in the estimation. The continued use of tranexamic acid must be reviewed on a regular basis by a senior obstetrician or anaesthetist.
Request laboratory tests	FBC, PT, APTT, fibrinogen, Blood Transfusion sample, U&E, Calcium Repeat bloods regularly ideally every 30mins The coagulation screen should be rechecked at regular intervals (including fibrinogen) and after attempts at coagulopathy correction.	Take samples at earliest opportunity Misidentification is commonest transfusion risk Samples will be taken by Porter to Laboratory, **NOT via air tube** ***May need to give components before results available***
Point of care Tests	ROTEM VBG Haemacue	Green top 3ml citrate filled to line Blood gas for $Ca^{2+,}$ lactate For Hb

<table>
<tr>
<td>Request suitable red cells</td>
<td>The porter will bring 2 units Emergency O Negative Blood and 2 units pre thawed plasma Group A (SHOCK PACK 1) to Delivery Suite.
The laboratory will prepare 4 units group compatible blood, which will be crossmatched retrospectively, and retain in lab until required
Additional blood to be issued /cross-matched as required.
The emergency call initiates the following timescales for the delivery of blood from the time of the emergency call to arrival for use:
<table><tr><td>2 units O Rh Negative Blood</td><td>Immediate</td></tr><tr><td>Group compatible blood</td><td>15 minutes</td></tr><tr><td>Requested X – matched blood</td><td>30 minutes</td></tr></table></td>
<td>Please inform blood bank if any of SHOCK PACK 1 units are used.
Use a pressure bag to speed infusion if necessary or Level 1 Rapid Infuser or Belmont Infusor
Warm blood and other fluids with blood warmer.

Other blood components (FFP, Cryoprecipitate, Platelets) WILL be issued based on ROTEM results</td>
</tr>
<tr>
<td>Request FFP

Request Cryoprecipitate</td>
<td>Based on ROTEM results
Indicated if there is documented coagulopathy or ongoing haemorrhage or the need to perform an invasive procedure.
Coagulopathy = PT or APTT ratio > 1.5.
When indicated, give 15 ml/kg of FFP the and recheck coagulation
If the fibrinogen is < 2 g/l give 2 units Cryoprecipitate, Check clotting 30 mins later.</td>
<td>Allow for thawing time (20mins) for FFP and Cryoprecipitate.
In some cases of severe persistent haemorrhage, it may be necessary to give FFP and/or cryoprecipitate before coagulation screen results are known. (2 units of FFP and 2 pooled units of cryoprecipitate can be given empirically in the face of relentless bleeding, while awaiting the results of coagulation studies).
This may be requested by either the an anaesthetist or obstetrician dealing with the emergency and does not require permission from the consultant haematologist
If Fib <2.0 g/l and woman is continuing to bleed, consider giving cryoprecipitate earlier.</td>
</tr>
<tr>
<td>Request platelets</td>
<td>Indicated if the platelet count is < 75 or in cases of severe, persistent bleeding.
Platelets not kept on site - liaise with the haematology BMS on call if you feel platelet transfusion may shortly be indicated.</td>
<td>Platelets have to be sent from Birmingham, allow sufficient time.</td>
</tr>
<tr>
<td>Monitor the Patient</td>
<td>- Keep BP > 100
- pulse oximeter (SpO2 and pulse), ECG
- Urine output (catheterized and aim for urine output of at least 0.5ml/kg/hr)
- conscious level
- Maintain temperature > 35^{o}C
- fetal heart monitoring if antepartum
- serial haematological investigations, arterial blood gases, U & Es, calcium</td>
<td>Consider 10ml 10% calcium chloride IV slowly if ECG changes suggestive of (prolonged Q-T interval) or biochemical evidence of hypocalcaemia
Consider intra-muscular or intra-myometrial Carboprost (maximum dose 250 micrograms every 15 mins to a maximum of 8 doses or 2 mg). This is kept in delivery suite fridge. Discuss with consultant obstetrician.
Do not move the patient whilst bleeding or unstable unless urgent operative intervention required.
Transfer to ITU if prolonged resuscitation is necessary, invasive monitoring is required and / or if inotropes are necessary and if indicated post-operatively.</td>
</tr>
<tr>
<td>Use of NovoSeven (Recombinant activated factor VII – rVIIa)</td>
<td>If haemorrhage persists despite attempts at correction of coagulopathy and surgical intervention is anticipated, r VIIa (NovoSeven) may be life saving.
A suggested dose is 90 micrograms/kg, which may be repeated in the absence of clinical response within 15–30 minutes.</td>
<td>In life-threatening MOH, rFVIIa may be considered following consultation with a consultant haematologist, as an adjuvant to standard pharmacological and surgical treatments.
THIS MUST BE DISCUSSED WITH THE CONSULTANT HAEMATOLOGIST AND WILL ONLY BE ISSUED ON THEIR APPROVAL. Refer to Trust Policy on Major Haemorrhage PR.60</td>
</tr>
</table>

Keep accurate Records	Record all blood and blood products transfused on Patient Transfusion Record. Use an HDU/ITU chart, Include fluid input/output	**ACCURATE DOCUMENTATION OF ALL BLOOD PRODUCTS GIVEN INCLUDING TIMES OF TRANSFUSION AND DONATION NUMBERS IS ESSENTIAL TO ENSURE TRACEABILITY** **Complete audit proforma – Appendix 1**
REMEMBER	***Anticipate blood/blood product requirements early*** ***Press door release button to allow easy access to Labour Ward*** ***Care of the relatives.*** ***THE RESUSCITATION TROLLEY / DEFIBRILLATOR IS IN THE LABOUR WARD CORRIDOR***	***Special situation – maternal refusal of blood transfusion/blood products for personal or religious reasons – make ante-natal plans in anticipation – Refer to specific Trust policy PR.34.***

Action Card 6: LABORATORY

1. On receipt of the Haemorrhage call, switchboard will state one of the following to the BMS:
   - Obstetric Emergency and Haemorrhage on *location*
   - Adult emergency & haemorrhage on *location*
   - Paediatric emergency and haemorrhage on *location*
   - Haemorrhage on *location*

2. The Team Leader/Communication Lead will then contact you with:
   - the patient's details (name, date of birth, identification number – if available), gender and details of haemorrhage.
   - Patient's weight, if paediatric call
   - Contact telephone number

   IF THE TEAM LEADER DOES NOT CONTACT THE BMS, THEN THE BMS MUST CONTACT THE LOCATION TO FIND OUT THIS INFORMATION

3. The Consultant Haematologist will have already being contacted by switchboard and is available to give advice if required.

4. On receipt of transfusion sample, select and issue 4 x Group compatible red cells and crossmatch retrospectively. Retain in laboratory until requested by clinical area

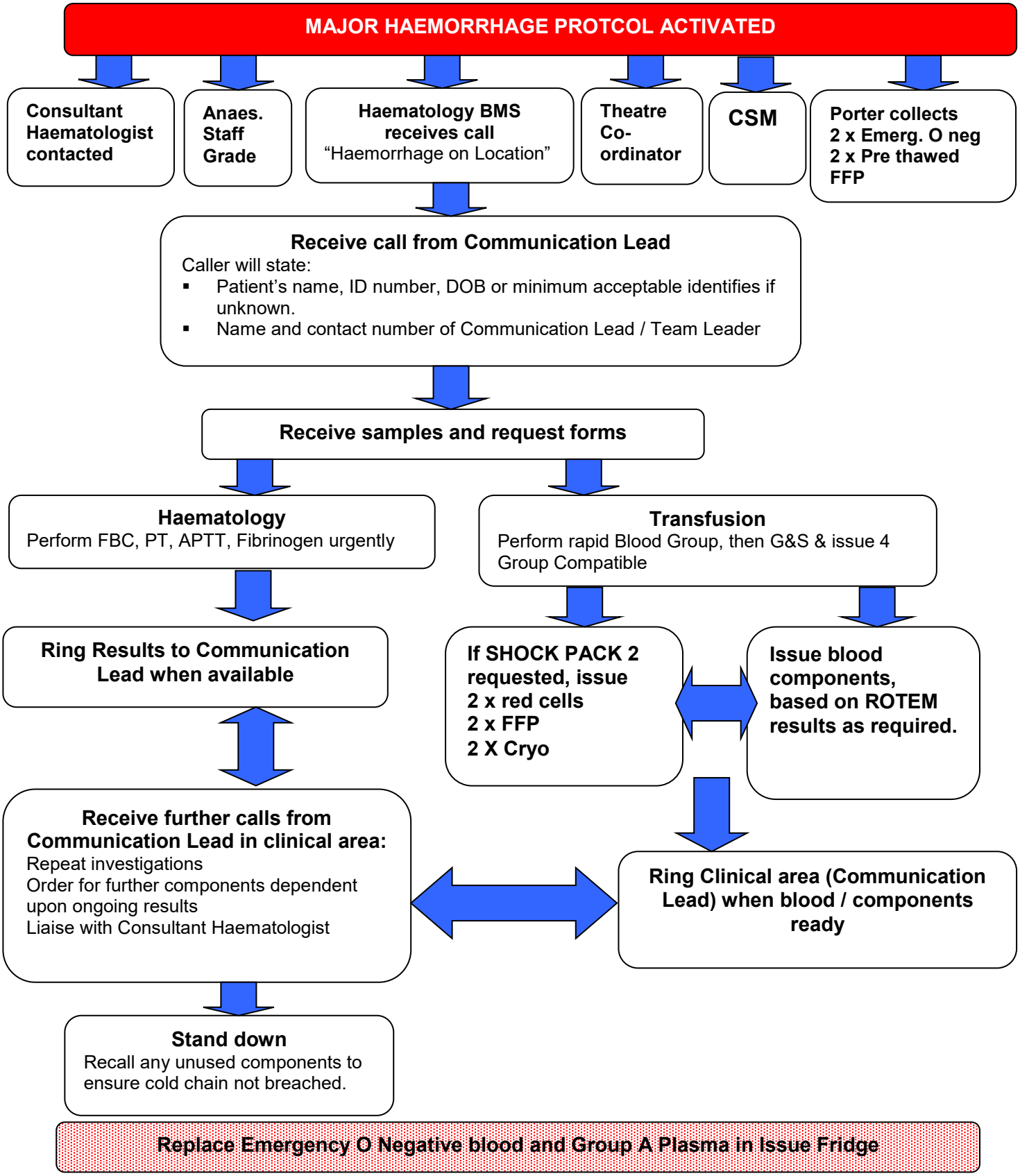
5. Check ROTEM results
   Once Haematology and Biochemistry results are available, the results must be phoned to the Communication Lead. Further blood components may be required dependent upon these results.
   NB Ensure that Fibrinogen level is performed with every coagulation screen.

6. Repeat Full blood counts and coagulation screens as required, and issue blood and blood components following further communication from the Communication Lead in the Clinical Area.

7. Remember to Replace the Emergency O negative blood and pre thawed Group A HT- plasma in the Issue Fridge

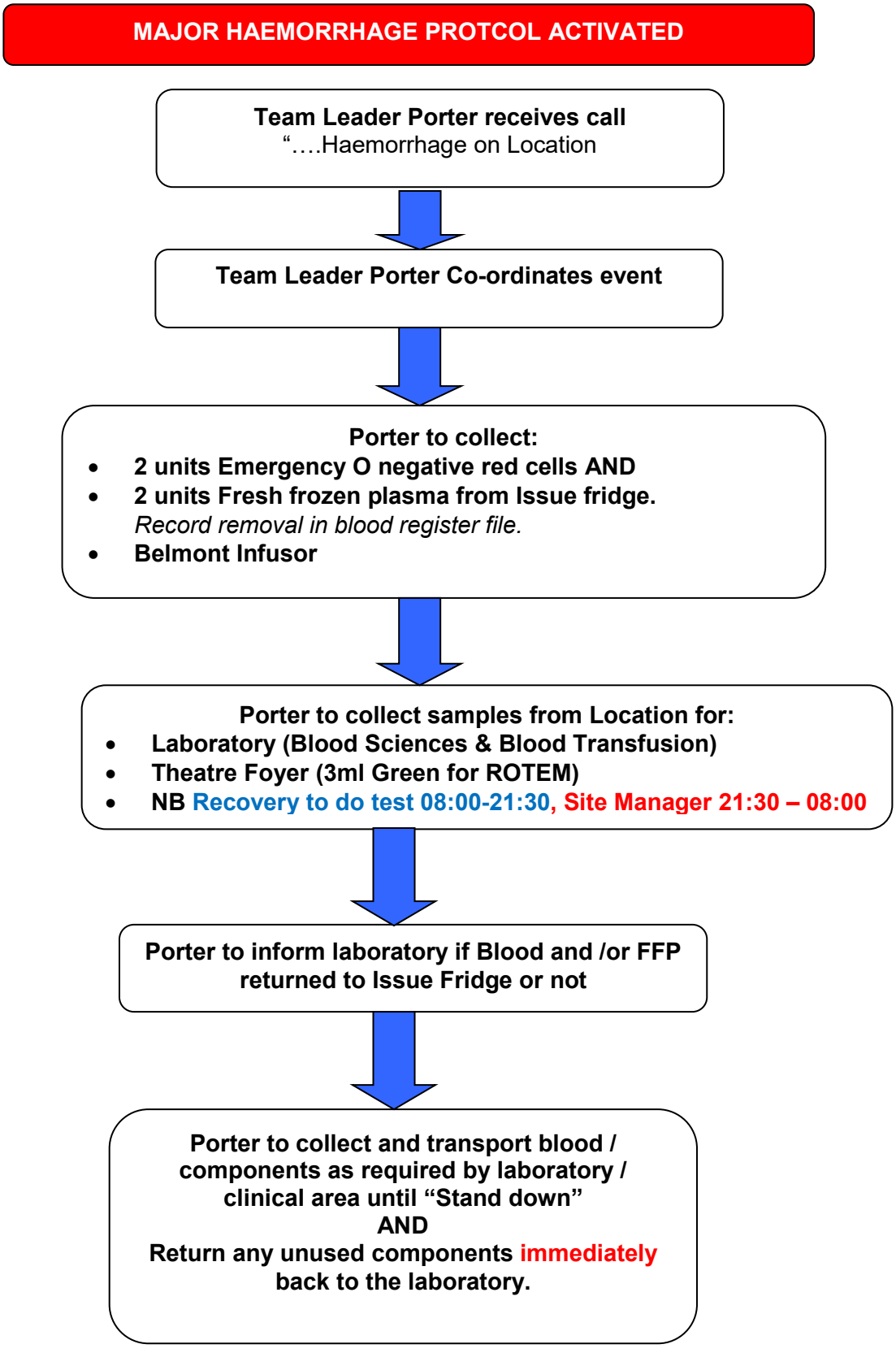
8. At Stand down:
   - Ensure documentation is completed
   - Ensure any unused blood and blood components are i**mmediately** returned to the laboratory, not the issue fridge, to ensure that the cold chain has not being breached.

Laboratory Management of Major Haemorrhage



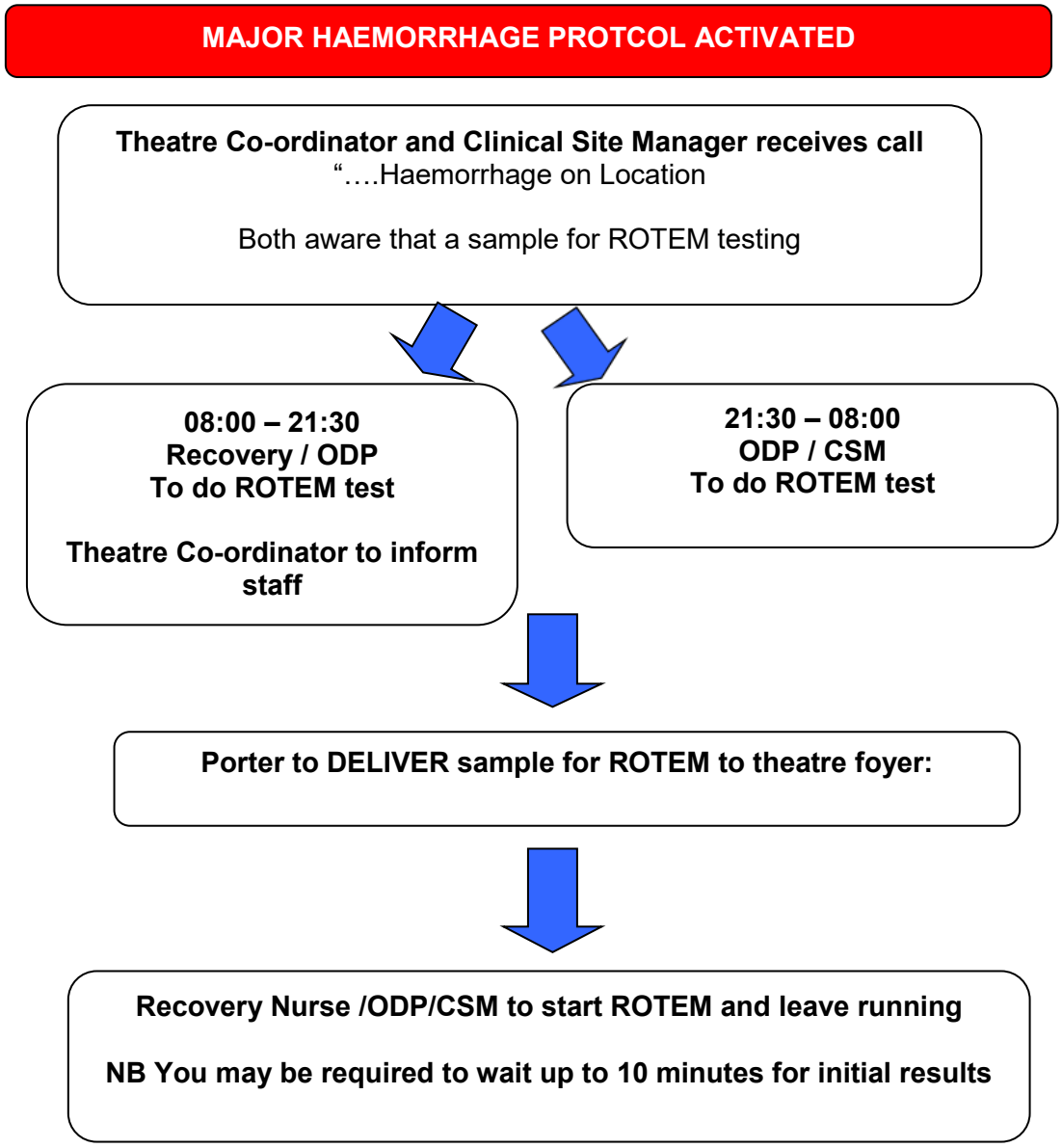
Action Card 7: TEAM LEADER PORTER

Porters Action on Receipt of Haemorrhage Call

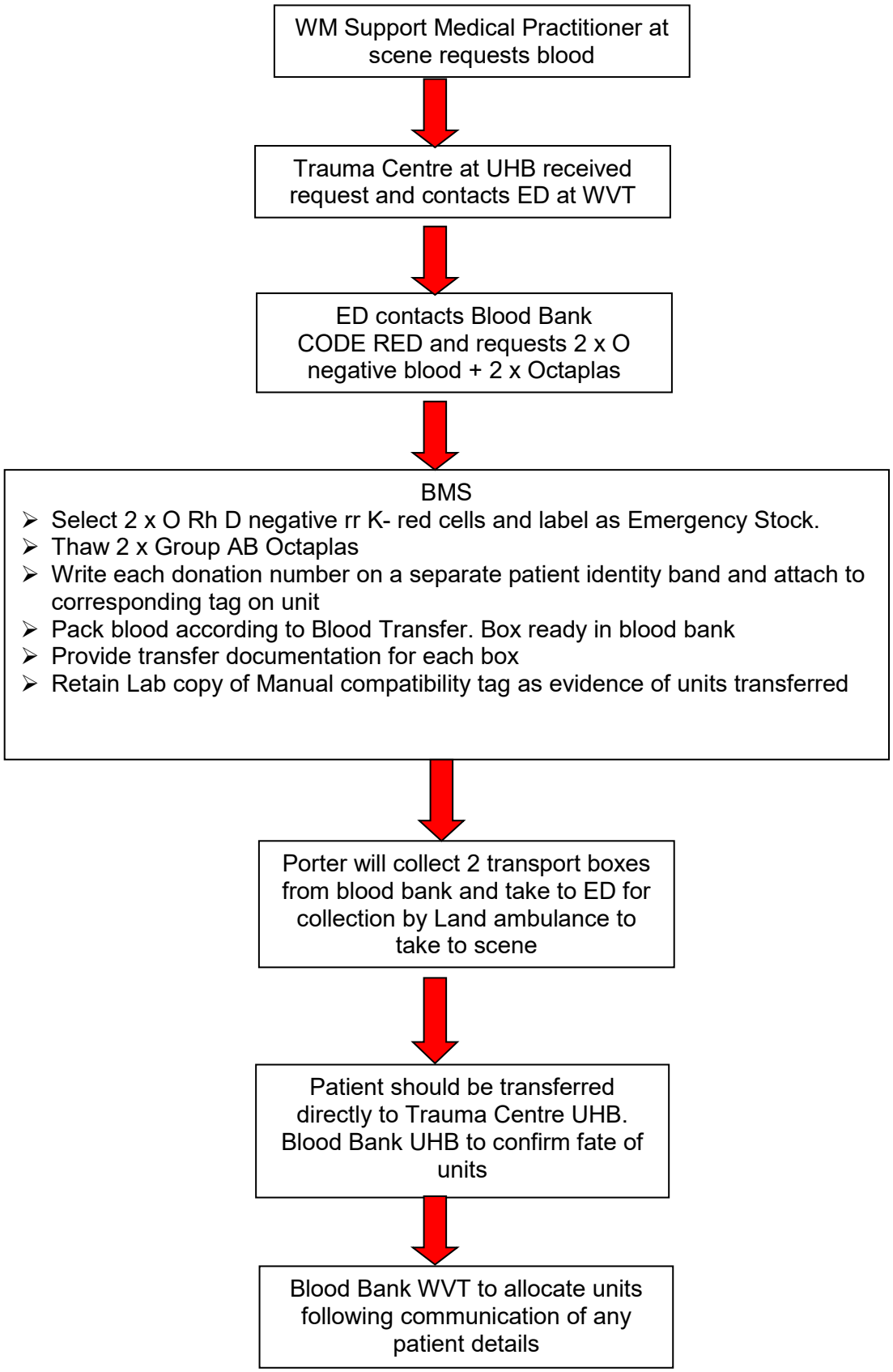


Action Card 8: RECOVERY, ODP AND CLINICAL SITE MANAGERS

Action on Receipt of Haemorrhage Call



Action Card 9: BLOOD TO SCENE – CODE RED



Guidelines for the use of Recombinant factor V11a (Novoseven) in the management of Haemostasis.

Recombinant factor V11a is thought to act by enhancing thrombin generation on activated platelets via a tissue factor dependant mechanism.

It is licensed for the treatment of bleeding episodes & surgery in patients with inherited or acquired

haemophilia & inhibitors to coagulation factors in V111 & 1X.

It is NOT licensed for general management of haemostasis.

Despite this, there is growing evidence for its efficacy & at times of uncontrollable haemorrhage where this is a potential for surgical intervention, it may be life saving.

Indication for Use:

Severe uncontrolled haemorrhage where bleeding continues despite correction as far as possible

of any coagulopathy with FFP, cryoprecipitate and platelets, and where a definitive procedure is

planned, e.g. massive obstetric haemorrhage.

Dose:

90ug/kg = 4.5KIU/kg diluted in water for injection as a single IV bolus over 2-5 minutes.

(10 vials of 60KIU each are kept in Blood Bank in Haematology)

Side Effects:

The most worrying is the possible increase in risk of thrombosis. Advice given is that any patients treated with Novoseven who are known to have a predisposition to VTE should be closely monitored
Others: pain, fever, headaches, vomiting.

Novoseven will ONLY be released after the direct authorisation from a Consultant Haematologist, all cases MUST be discussed.

Wye Valley NHS
NHS Trust

Massive Haemorrhage Call – ADULT – Data Collection Tool

DATE ☐☐ ☐☐ ☐☐☐☐ RLQ ☐☐☐☐☐☐☐ AGE ☐☐☐ Years OR Months

TIME OF CALL (24h CLOCK) ☐☐ ☐☐ NHS ☐☐☐ ☐☐☐ ☐☐☐☐

TIME OF STAND DOWN (24h CLOCK) ☐☐ ☐☐

Cause of Haemorrhage: ☐ Trauma / Injury ☐ Intra-abdominal (Spontaneous)

☐ Surgical / Procedure Complication ☐ Coagulopathy

☐ Obstetric ☐ ENT ☐ Other:……

Give Brief Details Below In All Cases:

Call Initiated By (Name / Grade / Speciality): ……

Patient Location: ☐ ED (A&E) ☐ Main Theatres ☐ Obstetric Theatres

☐ ITU ☐ CCU ☐ Delivery Suite ☐ Other: ……

Blood Products / Clotting Agents Given:	Date DD/MM:	Time of 1st administration (24h Clock):	N/A:
Tranexamic acid	☐☐ ☐☐	☐☐ ☐☐	☐
Prothrombin complex	☐☐ ☐☐	☐☐ ☐☐	☐
Emergency O^{NEG}	☐☐ ☐☐	☐☐ ☐☐	☐
Group compatible	☐☐ ☐☐	☐☐ ☐☐	☐
Cross-matched	☐☐ ☐☐	☐☐ ☐☐	☐
Cell-salvage blood	☐☐ ☐☐	☐☐ ☐☐	☐
FFP	☐☐ ☐☐	☐☐ ☐☐	☐
Platelets	☐☐ ☐☐	☐☐ ☐☐	☐
Cryoprecipitate	☐☐ ☐☐	☐☐ ☐☐	☐
Fibrinogen Concentrate	☐☐ ☐☐	☐☐ ☐☐	☐

Totals of products given:

Red cells ☐ (UNITS) FFP ☐ (ADULT VOLUMES / BAGS) Platelets ☐ (UNITS) Cryoprecipitate ☐ (UNITS)

Form Completed By: Name / Grade / Speciality:

11 EQUALITY IMPACT ASSESSMENTS

Equality Impact Assessment

1	**Name and Job Title of person completing assessment**	Blood Transfusion Practitioner
2	**Name of service, policy or function being assessed**	Transfusion of blood and blood components in event of major haemorrhage
3	**What are the main objectives or aims of the service/policy/function?**	The rapid provision of blood and blood components
4	**Date**	06/06/19

Stage 1: Initial Screening			
5	**What evidence is available to suggest that the proposed service/policy/function could have an impact on people from the protected characteristics? Document reasons, e.g. research, results of consultation, monitoring data and assess relevance as: *Not relevant or Relevant Low/Medium/High***		
Protected Characteristic		Relevance	Evidence
A	Race	Not Relevant	
B	Religion/Spirituality	Relevant	
C	Gender	Not Relevant	
D	Disability	Not Relevant	
E	Sexual Orientation	Not Relevant	
F	Age	Not Relevant	
G	Pregnancy/maternity	Not Relevant	
H	Gender reassignment	Not Relevant	
I	Marriage and Civil Partnership	Not Relevant	
J	Carers	Not Relevant	
If you assess the service/policy/function as **not relevant**, please proceed to section 11. If you assess the service/policy/function as **relevant**, continue to Stage 2, Full Equality Impact Assessment.			

Stage 2: Full Equality Impact Assessment		
6	**Are there service user, public or staff concerns that the proposed service/policy/function may be discriminatory, or have an adverse impact on people from the protected characteristics?**	
A	Public	No Concerns
B	Staff	No concerns
If there are **no concerns** proceed to section 11. If there **are concerns,** amend service/policy/function to mitigate adverse impact, consider actions to eliminate adverse impact, or justify adverse impact		
7	**Can the adverse impact be justified**	
Separate policy for Patients who refuse Blood exists		

8	**What changes were made to the service/policy/function as result of information gathering?**
None	
9	**What arrangements will you put in place to monitor impact of the proposed service/policy/function on individuals from the protected characteristics?**
Each event triggering the major haemorrhage protocol is recorded and reviewed by the Hospital Transfusion Committee.	

10	**List below actions you will take to address any unjustified impact and promote equality of outcome for individuals from protected characteristics. Consider actions for any procedures, services, training and projects related to the service/policy/function which have the potential to promote equality.**	
Action	Lead	Timescales
11	**Review date**	
I am satisfied that this service/policy/function has been successfully equality impact assessed. Date: 06/06/19 Author:		
Please send the completed assessment for scrutiny to: Risk & Security Support Officer, Vaughan Building, Ruckhall Lane, Belmont, Hereford. HR2 9RP.		

12 DOCUMENT CONTROL CHECKLIST

1. Indicate type of document (tick most appropriate box)

Policy☐ x Procedure☐ Guideline☐ Protocol☐ Pathway☐

Link to NHSLA/CQC/Trust Policy/Other (please specify)

2. Title:
PR.60 Major Haemorrhage Policy

3. Has the Document Template been applied fully?

Yes☐ x No☐
Comments:

4. Key Words: List the key words from your document. (Key words allow rapid/accurate searching of guidance when using the Trust intranet search engine)

Major Haemorrhage, ROTEM

5. Why have you written this document? (Complaint, incident, NICE/External advice, review, NHSLA standard level 1, CQC registration etc.)

NPSA Rapid Provision of Blood, NICE Transfusion Guidelines

6. Is there written patient information for this document?

Yes☐ No☐ x
If yes, please ensure that it is forwarded to the PALS Department for display on the intranet.
If no, does there need to be? Yes☐ No☐

7. Has an Equality Impact Assessment been completed and submitted with the document?
Yes☐ x No☐
If no, this document cannot be ratified/approved.

8. Please list the staff members and committees that have been consulted and have agreed with the submitted document.

Name	Job Title	Department
Dr R Dawes	Consultant Anaesthetist / Trauma Lead	Anaesthetics
Mrs T Clarke	Transfusion Practitioner	Blood Sciences
Dr S Willoughby	Consultant Haematologist	Haematology
Dr R McColm	Consultant ED	Emergency Department
Dr M Wheeley	Speciality Doctor	Anaesthetics
Dr D Cochran	Consultant Anaesthetist	Anaesthetics
Mr H Katali	Consultant Obstetrician	O&G
Mr M Cohn	Consultant Obstetrician	O&G
Mr M Oakley	Consultant Orthopaedic Surgeon	T&O
Dr S Meyrick	Consultant Paediatrician	Paediatrics
Miss C Cheek	Consultant Surgeon	General Surgery
Mr Ian Hancock	Blood Bank Manager	Blood Sciences

Dr E Torrance	Speciality Doctor	A&E

9. Have service users and/or other representatives been consulted?

Yes☐ x No☐
If yes, please provide details. If no, please justify.
Already consulted Anaesthetics, General Surgeons, T&O, ED, O&G
Change is in Paediatric pathway, who have been consulted

10a. For clinical guidance, have you documented the level of evidence and recommendations where relevant, within the guidance and given references?

Yes☐ X No☐
If no, please justify.

10. Does this guidance have additional resource implications for the Trust?

Yes☐ No☐ X
If no, please justify.

11. How will this guidance be implemented/disseminated within the Trust? (Tick as many as appropriate)

Training☐ X Technology Change☐ Department/Ward Based Education☐X

Other☐ Please specify _____

12. Are the monitoring arrangements defined clearly?

Yes☐ X No☐

13. Does submitted guidance conflict with NICE or NSF?

Yes☐ No☐ X
If yes, please justify

Signatures below indicate that the appropriate officers take responsibility for the clinical content, financial resources and performance management of this document:

Author(s)		**Departmental Manager/Executive Director**	
Print Name:		Print Name:	
Signature:		Signature:	
Date:	06/06/19	Date:	