Beriplex storage and use in Emergency Department RAH and IRH

Beriplex is a 4 factor Prothrombin complex concentrate used for the rapid reversal of warfarin anticoagulation in patients with an INR >2.0 who have potentially life-threatening bleeding or are scheduled for emergency surgery.

A single dose of Beriplex will be stored in the emergency department at RAH and IRH to allow rapid access to beriplex. **All use of Beriplex should be discussed with and authorised by the oncall Haematology medical staff** prior to administration to ensure correct and safe use.

Beriplex is stable at temperatures between 0 and 25C and should be stored in a fridge in the emergency department.

If Beriplex is used then the attached form should be completed and returned to Blood Transfusion to allow re-stocking of the Emergency Department supply. To allow accurate recording in patient's blood transfusion records please attach Traceability lables from all Beriplex vials to this form.

Dosing

The appropriate dose is based on current INR and patient weight (kg) – please refer to Table 1
A 500u vial of Beriplex reconstitutes to 20ml. Maximum single dose is 200ml (5000u). Maximum recommended infusion rate is 210iu/min = **8ml/minute**, or not >3iu/Kg/min.

Parenteral Vitamin K (usually 5-10mg intravenously) should also be administered.
Coagulation screen should be assessed approx. 10 min after Beriplex completion of infusion and after a further 6 & 24 hours, and at other times as clinically indicated.
In some cases additional doses of Beriplex and/or Vitamin K may be required.

Table 1: Dosing of Beriplex (Maximum dose 5000iu, discuss with haematology regarding rounding to complete vial.)

INR	Approximate Dose
2.0-3.9	1 ml/Kg = 25 iu/Kg
4.0-6.0	1.4 ml/Kg = 35 iu/Kg
>6.0	2 ml/Kg = 50 iu/Kg

Contra-indications

Absolute: Heparin Induced Thrombocytopenia or allergy to heparin or citrate (this should be discussed with consultant haematologist)
Relative: DIC or High risk of Thrombosis (balance risks v benefits)

Administration

Beriplex is dual viral inactivated [Pasteurisation and nanofiltration]
Beriplex is provided in vials of 500iu which reconstitute to 20ml with the diluent provided (sterile water) and should not be further diluted

- Once reconstituted Beriplex should be withdrawn from vials using the filter device supplied and administered immediately (within 30-60mins)
- The infusion rate should not exceed 8ml/min or 3iu/kg/min (whichever is lower)
- Side Effects are rare and include headache, pyrexia, anaphylaxis, angio-oedema, thromboembolism
- Attach Traceability labels to “Emergency Department Beriplex Use” form

Each 500iu vial contains:

Factor II	400 – 960iu	[34iu/ml]	Factor VII	200 – 500iu	[17iu/ml]
Factor X	440 – 1200iu	[41iu/ml]	Factor IX	400 - 620iu	[25iu/ml]
Protein C	300 – 900iu	[30iu/ml]	Protein S	260 – 520iu	[19iu/ml]

Emergency Department Beriplex Use
(Complete form to allow Restock of Beriplex Supply and record of administration in Patient's Blood transfusion record)

Patient's Name (Attach sticker if available)	
Patient's CHI Number	
INR	
Weight	
Dose Given	
Haematology Consultant Patient discussed with	
Please attach traceability labels below and on reverse	