

## COMPONENTS FOR ADULT USE

### Fresh Frozen Plasma (FFP)

Plasma is obtained from whole blood or component donation from male\* donors and frozen to maintain activity of labile coagulation factors.

\* Plasma can occasionally cause a reaction called Transfusion-Related Acute Lung Injury (TRALI) which leads to problems with breathing and is sometimes severe. One cause is thought to be certain proteins present in the plasma when the donor has been pregnant in the past. To minimise the risk of TRALI, all UK plasma is from male donors who have never had a transfusion.

#### Clinical Indications

*(Guidelines for the use of fresh-frozen plasma, cryoprecipitate and cryosupernatant. Br J Haematol 2004; 126(1):11-28 and as amended. Date for Review Dec 1.2011)*

- Replacement of single coagulation factor deficiency where specific factor concentrate is unavailable.
- Multiple coagulation factor deficiencies and disseminated intravascular coagulation (DIC)
- Thrombotic Thrombocytopenic Purpura (TTP), if no solvent detergent FFP is available.
- Immediate reversal of Warfarin effect if prothrombin complex concentrate (PCC) is unavailable.
- Haemostatic defects associated with liver disease if bleeding/invasive procedure
- Clinically abnormal haemostasis following massive blood transfusion or major surgery
- Treatment of angio-oedema due to C1 inhibitor deficiency if specific concentrate is unavailable

FFP is generally not indicated for:

- Vitamin K deficiency in intensive care unit (ICU) patients
- Reversal of prolonged international normalised ratio (INR) **in the absence of bleeding**
- As replacement fluid in plasma exchange procedures - except for TTP

#### Contraindications and cautions

FFP should never be used as a volume expander in hypovolaemia.

Plasma components should not routinely be used in patients with known hypersensitivity to plasma, for example IgA deficient patients with anti-IgA antibodies.

### Fresh Frozen Plasma, IgA deficient

Plasma that has been screened for IgA deficiency and then prepared in the same way as ordinary FFP. This plasma is only available in 2 centres in the UK (Colindale and Sheffield) and adequate time must be given to transport it to the required location. It is used for patients who have IgA antibodies and have had severe transfusion reactions in the past.

### Cryoprecipitate

Cryoprecipitate consists of the cryoglobulin fraction of plasma containing the major portion of Factor VIII and fibrinogen. It is obtained by thawing a single donation of FFP at  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ . The cryoprecipitate is then rapidly frozen to  $-30^{\circ}\text{C}$ . It is available as single units or as pools of 5.

#### Clinical Indications

Bleeding associated with hypofibrinogenaemia ( $<1\text{g/litre}$ ) and congenital or acquired dysfibrinogenaemia.