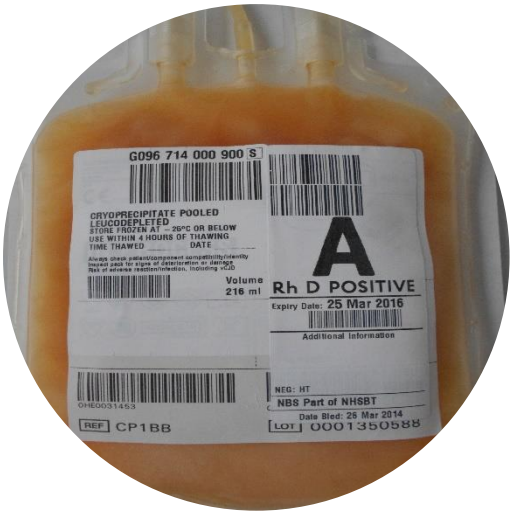
NHS
Blood and Transplant



Information for Healthcare Professionals

FACTSHEET
Cryoprecipitate

The indications for transfusing cryoprecipitate are limited and specific.
Please transfuse appropriately.

Cryoprecipitate

Cryoprecipitate contains concentrated Factor VIII:C, von Willebrand factor, fibrinogen, Factor XIII, and fibronectin and is produced by further processing of Fresh Frozen Plasma (FFP). Clinically it is used to replace fibrinogen.

As with FFP, the plasma from which the cryoprecipitate was produced has been leucodepleted and was obtained from a male donor to reduce the risk of transfusion-related acute lung injury (TRALI). Cryoprecipitate should be stored at a core temperature of -25°C or below for up to 36 months.

Clinical indications for use of cryoprecipitate in adults*

- **Clinically significant bleeding and a fibrinogen level <1.5g/L (<2g/L in obstetric bleeding)**
- **Fibrinogen level is <1g/L and pre-procedure**
- **Bleeding associated with thrombolytic therapy**
- **Inherited hypofibrinogenaemia where fibrinogen concentrate is not available**

**National Blood Transfusion Committee Indication Codes for Transfusion, 2020*

Presentation and dosage of cryoprecipitate

Cryoprecipitate is available as a single unit, or as a pooled product made up of five single units. Pooled units are more commonly used to treat adult patients.

The adult therapeutic dose is two pooled units, or one single unit per 5-10kg body weight, dependant on the degree of fibrinogen deficiency. Paediatric dosing is 5-10mL/kg.

Practical instructions for the use of Cryoprecipitate

Once thawed, Cryoprecipitate must not be refrozen and should be used immediately. If delay is unavoidable the component should be stored at ambient temperature (i.e. **not** in a fridge), to prevent re-precipitation, and must be transfused within four hours. Transfuse using a CE or UKCA- marked blood transfusion set. The typical infusion rate is 10-20mL/ kg/hr (30-60 min per five pool unit).

Compatibility

ABO group identical Cryoprecipitate should be given whenever possible; if not possible Cryoprecipitate of a different ABO group may be acceptable as directed in the blood group selection table.

ABO compatibility for plasma components is different to that of red cells and **group O Cryoprecipitate MUST only be given to group O recipients.**

Blood group selection for Cryoprecipitate

Recipient Group	O	A	B	AB
1st Choice	O	A	B	[2]AB
2nd Choice	A	[1]B	[1]A	[1]A
3rd Choice	B	-	-	[1]B

[1]Suitable for use in adults if negative for high titre anti-A/anti-B (labelled HT-)
[2]Small numbers of Group AB cryoprecipitate may be available on request but this item is not routinely stocked, due to the low frequency of group AB in the population group A, HT- is in practice the universal component.

D group

Cryoprecipitate **does not need to be matched for D group**. D positive plasma components may be given to D negative recipients without the need for anti-D Ig prophylaxis. The EU Blood Directive currently requires that the D group is stated on the label.

If you are unsure about the compatibility of Cryoprecipitate for your patient always check with your hospital transfusion laboratory staff before transfusing.

Specific requirements

Cryoprecipitate has no cellular content and therefore does not need to be irradiated or selected as Cytomegalovirus (CMV) sero-negative.

The use of other frozen components produced is covered in a separate factsheet ‘Fresh Frozen Plasma (FFP)’.

References

Green, L. et al on behalf of British Society of Haematology (2018) Guidelines on the spectrum of fresh frozen plasma and cryoprecipitate products: their handling and use in various patient groups in the absence of major bleeding. Available at: https://www.b-s-h.org.uk/guidelines/guidelines/spectrum-of-fresh-frozen-plasma-and-cryoprecipitate-products/

Stanworth, S. et al on behalf of the British Society for Haematology (BSH) (2022) Haematological management of major haemorrhage. Available at: https://b-s-h.org.uk/guidelines/guidelines/haematological-management-of-major-haemorrhage-2022

National Blood Transfusion Committee (2020) Indication Codes for Transfusion – An audit tool. Available at: https://nationalbloodtransfusion.co.uk/recommendations

NHS Blood and Transplant (2022)Portfolio of components and guidance for their clinical use (specification SPN223/11.1). Available at: https://hospital.blood.co.uk/components/portfolio-and-prices/

Robinson, S. et al on behalf of the British Society for Haematology (BSH) (2017) Administration of Blood Components. Available at: https://www.b-s-h.org.uk/guidelines/guidelines/administration-of-blood-components/

Contact us

We would welcome your feedback and comments on this leaflet. You can contact us:

By email to: PBM.team@nhsbt.nhs.uk

NHS Blood and Transplant (NHSBT) saves and improves lives by providing a safe, reliable and efficient supply of blood and associated services to the NHS in England. We are the organ donor organisation for the UK and are responsible for matching and allocating donated organs. We rely on thousands of members of the public who voluntarily donate their blood, organs, tissues and stem cells.

For more information
Visit nhsbt.nhs.uk
Email enquiries@nhsbt.nhs.uk
Call 0300 123 23 23