FACTSHEET

Standard Cryoprecipitate and Methylene Blue treated Cryoprecipitate

Information for Healthcare Professionals

The indications for transfusing cryoprecipitate are limited and specific.

Please transfuse appropriately.

Standard Cryoprecipitate

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

As with FFP, the plasma from which the cryoprecipitate was produced has been leucodepleted and was derived from a previously tested donor.

The component should be stored at a core temperature of –25°C or below for a maximum of 36 months.


- **Acute Disseminated Intravascular Coagulation (DIC)** where there is bleeding and a fibrinogen level <1g/L

- **Advanced liver disease** to correct bleeding or as prophylaxis before surgery when the fibrinogen level is <1g/L
• **Bleeding associated with thrombolytic therapy** causing hypofibrinogenaemia

• **Hypofibrinogenaemia secondary to massive transfusion.**
  Emerging evidence suggests a fibrinogen level of >1.5g/L is required

• **Renal failure or liver failure** associated with abnormal bleeding when Desmopressin is contraindicated or ineffective

• **Inherited hypofibrinogenaemia** where fibrinogen concentrate is not available.

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.

**Dosage of cryoprecipitate**
A single unit contains a mean of approximately 400-460mg of fibrinogen. The adult therapeutic dose is two pools of five units, or one unit per 5-10kg body weight, dependant on the degree of fibrinogen deficiency.

A dose of two pools of five units would typically contain between 3-3.5g of fibrinogen and raise the plasma fibrinogen level by about 1g/L.

**Methylene Blue treated Cryoprecipitate (MB Cryoprecipitate)**
Methylene Blue (MB) treated Cryoprecipitate is derived from FFP from a previously tested donor, is leucodepleted and has been treated with methylene blue (MB) and exposure to visible light to inactivate pathogens. Any residual MB is then removed.

This component is intended for use for patients born on or after 1st January 1996. It is only available in single units.

**Practical instructions for the use of Cryoprecipitate**
Once thawed, the component must not be refrozen and should be used immediately. If delay is unavoidable, the component should be stored at ambient temperature (NOT in a fridge) to prevent re-precipitation and must be transfused within four hours. Transfuse using a standard blood giving set with a 170-200 micron filter.

**Compatibility**
Cryoprecipitate of the same ABO group as the patient should be given whenever possible. If this is not possible see table below or go to [http://hospital.blood.co.uk/products/](http://hospital.blood.co.uk/products/)

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Group AB MB treated cryoprecipitate is not available.

**RhD group** – Cryoprecipitate does not need to be matched for RhD group. RhD positive plasma components may be given to RhD negative recipients without the need for anti-D Ig prophylaxis.

**Special requirements** – Cryoprecipitate has no cellular content and therefore, does not need to be irradiated.

The use of other frozen components produced by NHSBT is covered in a separate factsheet:
• **Standard Fresh Frozen Plasma**

Further supplies of this factsheet can be ordered via [www3.access-24.co.uk](http://www3.access-24.co.uk).

For further information please consult your Hospitals Blood Transfusion Policy or contact a member of your Hospital Transfusion Team.
NHSBT is a Special Health Authority within the NHS, and provides the blood that patients receive.

The information in this factsheet has been sourced from NHSBT transfusion experts.

NHSBT Customer Services Patient Blood Management Team does not accept any legal liability for errors or omissions.

References:


British Committee for Standards in Haematology (2007) Amendment to Guidelines for the use of FFP, cryoprecipitate and cryosupernatant (clarification of storage after thawing) http://www.bcshguidelines.com/ (last accessed 19.08.14)


NHS Blood and Transplant (2014) Portfolio of components and guidelines for their clinical use (specification SPN 223/6) http://hospital.blood.co.uk/products/index.asp (last accessed 19.08.14)
