

## **MEASURES CURRENTLY IN PLACE IN THE UK TO REDUCE THE POTENTIAL RISK OF TRANSMITTING VARIANT CREUTZFELDT-JAKOB DISEASE VIA BLOOD**

Since 1996, when the theoretical risk of transmitting variant Creutzfeldt-Jakob disease (vCJD) through blood was first identified, a series of precautionary measures approved and endorsed by independent scientific Advisory Committees have been implemented to reduce the risk to the blood supply and to products made by fractionating plasma.

All these measures have been reviewed and endorsed by the Advisory Committee on the Safety of Blood, Tissues and Organs (SaBTO), and SaBTO publishes this document on its website for ease of reference.

The measures are summarised below. They are applicable to all blood / blood components and blood products. Where SaBTO has recently reviewed a measure, detailed information can be found in the published meeting papers.

### **Withdrawal of blood**

Since December 1997, all blood components, plasma products or tissues obtained from any individual who later develops clinical vCJD have been withdrawn/recalled to prevent their use.

**Comment** – this measure continues, supported by the effective application of the Transfusion Medicine Epidemiology Review (TMER) collaborative project between the UK National CJD Research and Surveillance Unit and the UK Blood Services. TMER investigates any evidence that Creutzfeldt-Jakob disease (CJD) or variant Creutzfeldt-Jakob disease (vCJD) may have been transmitted via the blood supply. Further information on TMER can be found at:

<http://www.cjd.ed.ac.uk/TMER/TMER.htm>

### **Leucoreduction**

Since October 1999, white blood cells (which may carry a risk of transmitting vCJD) have been reduced in all blood used for transfusion, by a process known as leucodepletion or leucoreduction.

**Comment** – this measure continues; it not only provides a measure of vCJD risk reduction but additionally is crucial in supporting SaBTO's recommendations with regard to cytomegalovirus risk reduction.

### **Donor deferral**

Since April 2004, following the report of the first presumed case of transmission of vCJD by blood transfusion, individuals who had themselves received a transfusion of blood components since January 1980 were excluded from donating blood. In July 2004, this exclusion criterion for blood donation was extended to include two other groups who had received transfusions of blood components since 1980:

- Previously transfused platelet donors
- Donors who were unsure if they had previously had a blood transfusion.

This measure applies to donors who have been transfused anywhere in the world.

**Comment** – this measure continues. Given the potential for transmission of vCJD via blood and continued uncertainties as to the implications of the prevalence of abnormal prion protein, this measure is considered important to restrict potential spread. Each recipient acts as an end stage in any potential transmission.

### **Clotting factors and immunoglobulin**

Since 1999, plasma for the manufacture of fractionated plasma products, such as clotting factors and immunoglobulins, has been obtained from non-UK sources. Since 1998, synthetic (recombinant) clotting factor for the treatment of haemophilia has been provided to the under-16s, and since 2005 this measure has been extended to all patients for whom it is suitable.

**Comment** – this measure continues as a means to reduce the potential risk of transmitting vCJD (and other blood borne infections) to those with bleeding disorders and other conditions.

### **Plasma sourcing**

Since 2004, fresh frozen plasma for treating those born on or after 1 January 1996 has been obtained from abroad (the USA or Austria).

**Comment** – this measure continues, as confirmed by SaBTO in March 2012.

The NHS has been instructed to purchase imported solvent detergent-treated pooled plasma for adult patients with thrombotic thrombocytopenic purpura.

**Comment** – this measure continues, as confirmed by SaBTO in March 2012.

### **Platelets**

In December 2014 SaBTO reviewed the evidence and confirmed removal of the requirement to produce at least 80% of platelets by apheresis, and recommended that platelet additive solution (PAS) should be used for the suspension of pooled platelets.

**Comment** – These measures continue, as reducing apheresis and using platelet additive solution for pooled platelets provide additional, cost-effective risk reduction measures.

### **Cryoprecipitate**

From 2005, cryoprecipitate produced from methylene blue treated plasma imported from the USA is being used for children up to the age of 16.

**Comment** – this measure continues, and may be reviewed by SaBTO if new information about alternative products becomes available.

**SaBTO**  
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