

**The use of first donations in the manufacture of blood components for intrauterine transfusion and transfusion of infants under one year old**

At the meeting of 10<sup>th</sup> December 2012, it was agreed that the UK blood services should undertake a review of the 1997 recommendation by the Advisory Committee on the Microbiological Safety of Blood, Tissues and Organs for Transplantation (MSBTO - SaBTO's predecessor) that all blood components for intrauterine transfusion and transfusion of infants under one year old should be manufactured from second or subsequent blood donations.

The rationale for the original recommendation cites:

- A five to ten fold lower rate of viral markers in repeat donors than in new donors; however MSBTO could not conclude that there would be a lower risk of window period donations due to lack of data on incidence infections in new donors
- A potential reduction in the transfusion burden of any leucocyte-associated infective agents carried by the donor that have escaped routine screening (leucocyte depletion has been carried out universally since 1999)
- A reduced exposure to any allogenic leucocyte antigens.

The current risk assessment identified that:-

- New donors currently contribute 8.5% of all donations
- Changes to blood donation screening in recent years include the introduction of NAT (Nucleic Acid amplification Technology) testing for hepatitis B, hepatitis C and HIV. This has led to a decrease in the infectious window period
- The number and rate of markers of infection in all blood donors remains low but the rate is higher in new donors reflecting undiagnosed prevalent infections
- The modelled risk of a potentially infectious window-period donation entering the blood supply in the UK during 2010/2011 was estimated to be lower in repeat donors than new donors, but only marginally less than that from all donations
- Risk estimates suggest that one infectious hepatitis B window-period donation from all donations will enter the blood supply every 0.5 years, every 0.6 years for repeat donors only; one infectious hepatitis C window-period donation will enter the blood supply every 10 years, every 13.3 years for repeat donors only, and one infectious HIV window-period donation from both all donations and repeat donors every 2.7 years
- Donor compliance with the donor selection guidelines is one of the most important factors in reducing window-period infections.

It is therefore recommended that the restriction on the use of first donations for intrauterine transfusion and transfusion of infants under one year old should be lifted.

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**SaBTO members are asked:**

- 1. If they agree that the additional risk of viral transmission posed by adding new donors to the donation pool is very low; and**
- 2. If they agree with the proposed recommendation to remove the restriction on the use of first time donations for the manufacture of components for intrauterine transfusion and transfusion of infants under one year old.**