Infusing blood products FAQs

1. **How many units of blood can be transfused through one CareFusion blood administration set?**

   The maximum number of consecutive blood units transfused per blood tubing set during testing was two. CareFusion blood administration sets meet the specifications outlined by the International Organization for Standardization (ISO)\(^1\) in **ISO 1135-4, Transfusion equipment for medical use – Part 4: Transfusion sets for single use.**\(^2\) As such, CareFusion blood administration sets meet the ISO specifications when two consecutive units of blood are transfused in one set.

2. **What is the acceptable standard range for a blood filter?**

   According to the American Association of Blood Banks (AABB), standard blood infusion sets have an in-line filter that ranges from 170-260 microns. CareFusion blood administration sets include a filter within that accepted range with pore sizes of either 180 or 200 microns.\(^3\)

3. **What size of catheter lumen is required to infuse blood?**

   The lumen of catheters used for blood transfusion should be large enough to allow appropriate flow rates without damaging the vein. According to the AABB, there are no strict guidelines limiting the size of the catheter used for blood transfusions. The AABB states that an 18G catheter is preferred as it provides good flow rates for cellular components without excessive discomfort to the patient, but patients with small veins require a much smaller catheter.

4. **Can blood be infused through the SmartSite® needle-free valve?**

   The SmartSite valve has a non-tortuous fluid path equal to the diameter of an 18G needle/catheter. As stated previously, the AABB explains that red blood cells can be transfused with an adequate flow rate through an 18G needle/catheter.

5. **Can I deliver blood and blood products via an infusion pump?**

   This is routinely done in the medical environment. CareFusion Alaris® systems completed two studies that demonstrated that the Alaris pump module caused no clinically significant hemolysis while infusing packed red blood cells or platelets.\(^4\) (See Administration of blood products through the Alaris pump module available at [www.carefusion.com/customer advocacy/Alaris clinical documentation/white papers](http://www.carefusion.com/customeradvocacy/Alarisclinicaldocumentation/whitepapers).)
References:

1. International Organization for Standardization, Case postale 56, CH-1211, Geneva 20 Switzerland.


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