



ACCES Recommended Protocol for Administration of Feline Packed Red Blood Cells

- Feline Packed Red Blood Cells (PRBCs) are the treatment of choice for anemia. They contain very few white blood cells, platelets, or coagulation factors.
- Always know the blood type of your donor and recipient. For cats there is no universal blood type. Instead, cats are typed using the A-B system. Most cats are type A, but some cats are type B, and there is no specific breed that will always be one or the other type, so *it is important to blood type each cat before a transfusion*. The high levels of anti-A alloantibodies in group B cats means that there is a high risk for severe transfusion reaction, including death, if B cats are given A type blood.
- It is always a good idea to cross match the unit of blood to be transfused against the recipient. Even if the donor and recipient are the same blood type, a transfusion reaction is still possible. Blood typing and cross matching services are available through ACCES.
- To administer PRBCs, first remove the unit from the refrigerator and warm it up to room temperature. *Do not use a warm water bath or put red cells in the microwave!* Wrap them in a towel, or warm under your arm.
- Examine the patient and establish a baseline TPR. Make sure that the IV catheter is patent. Discontinue any other medications and fluids during transfusion administration unless specifically told otherwise by your veterinarian. Also begin a transfusion record, including patient information, donor and recipient blood types, the unit's donor and unit numbers, TPRs, and administration rates during transfusion. A sample form is available at ACCES.
- Calculate administration rates. Once blood has been warmed to room temperature, it is only good for 4 hours, so calculate administration rates accordingly. A very slow administration rate should be used initially, as the patient is closely monitored in the first 15-30 minutes of the transfusion for any signs of reaction. A safe rate for the first 15 minutes is 1 ml/kg/hour. The rate should then be calculated to finish the transfusion within 4 hours.
- Cat units are small, generally 25-35 mLs. A syringe pump is the preferred way to administer a small volume. If one is available to administer a feline unit of packed red cells, first draw up the entire warmed unit in a 60 ml syringe. Then attach a heparin filter to the end of the syringe, and an extension set to the heparin filter. Heparin filters are available through ACCES.
- Prime the line so that blood flows through the heparin filter and the extension set, and then hook up to the patient. *Never give a blood or plasma transfusion without a filter*. Red blood cells can only be given through certain types of IV pumps – please check the manufacturer recommendations before using any IV pump for giving these cells. Many types of IV pumps will damage the red blood cells with the rotating mechanisms for fluid delivery.
- Once a transfusion has been started, watch the patient carefully, especially in the first hour for signs of a transfusion reaction. Report any vomiting, facial swelling, hives, or changes in temperature or more than 1 degree Fahrenheit to the doctor.
- **If you have any questions, please feel free to contact ACCES at any time.**

