

Canine Fresh Frozen Plasma (FFP)



For animal treatment only

Presentation:

Canine Fresh Frozen Plasma (FFP) is plasma which has been separated from whole blood and frozen within 24 hours post collection. It contains all plasma proteins including the labile and non-labile clotting factors.

One standard unit is approximately 200ml; One half unit is approximately 100ml. These contain Fresh Frozen Plasma in CPD anticoagulant.

Uses:

Fresh Frozen Plasma may be indicated for the treatment of clotting factor deficiencies, plasma protein deficiencies, and disseminated intravascular coagulation. It may also be useful for management of severe haemorrhagic shock/blood loss in conjunction with Packed Red Blood Cells.

Fresh Frozen Plasma is a more effective source of therapeutic levels of labile clotting factors Fibrinogen (factor I), factor VIII, and von Willebrand's factor than Frozen Plasma.

Dosage and administration:

Fresh Frozen Plasma is intended for intravenous use only.

Dosage: The standard recommended dose for clotting factor deficiencies is 10-30ml/kg. Following administration, every patient's coagulation should be monitored as to their individual response. The required dose may be more or less than the standard dose. Patients should continue to be treated until appropriate resolution of clinical signs. If used for albumin replacement, a dose of approximately 30ml/kg is required. The efficacy of this has not been validated in prospective trials.

Rate of administration: Start transfusion at a rate of 0.5-1ml/kg/hr for the first 15-30 minutes, according to patients' fluid status, if hypovolaemic, at rates up to shock doses (as fast as blood is being lost), if euvoalaemic 5-10ml/kg/hr, if compromised circulation (cardiovascular compromise/renal failure) 1-2ml/kg/hr.

If used for the management of hypoalbuminaemia, Fresh Frozen Plasma should be administered as a constant rate infusion. Higher rates of infusion are typically associated with greater increase in albumin. Dogs receiving this for hypoalbuminaemia should be monitored carefully for signs of volume overload.

Warming/defrosting: Remove carefully from the freezer and protective packaging. The pack becomes quite brittle when frozen and may easily crack or be otherwise damaged through rough handling. To prepare for administration, passive warming at room temperature is recommended. Where active warming is required, do NOT use a microwave oven. Place in a waterproof zip lock bag and immerse the bag in a water bath of < 37°C.

Administration: Once thawed and breached for use, Fresh Frozen Plasma should be used within 4 hours. Any product remaining after this time should be discarded.

Dosage and administration continued:

Always administer using a blood administration set or suitable inline blood filter. Do not mix or administer any other intravenous drugs or products through the same IV line. 0.9% saline ONLY can be used to flush IV lines and catheter. Pet Blood Bank recommends a new blood administration set is used for each unit of blood product.

Monitoring: The infusion should be commenced slowly, and the patient monitored closely (see adverse reactions). It is recommended that patients be monitored using a transfusion record form, available to download from Pet Blood Bank's website. Please ensure the product unit ID is recorded on the patient's record.

Precautions, warnings, and adverse reactions:

Canine Fresh Frozen Plasma is for use in puppies and adult dogs not destined for the food chain only.

Compatibility: Performing appropriate pre-transfusion testing should be considered when using blood products to increase patient safety.

Precautions: Inspect before use. If you have any concerns, please contact Pet Blood Bank for further advice.

Handling precautions: Appropriate personal protective equipment should be considered when handling any blood product. In case of accidental contact with skin, wash affected areas thoroughly with warm soapy water. Unused product and empty pack should be discarded and disposed of as clinical waste.

Warning: Care should be taken to avoid volume overload.

Despite serological and PCR testing performed on a proportion of the donors, a risk of transmitting infectious agents to the patient is present. Careful donor selection, care, and available laboratory tests do not eliminate this hazard.

Adverse reactions to Fresh Frozen Plasma:

Acute and delayed, immunological and non-immunological transfusion reactions can occur with products of this type. These can manifest a variety of clinical signs. If during the transfusion, tachycardia, increased temperature, hyperventilation, emesis, hives, or trembling occur, slow the transfusion down. Categorise the type of reaction and treat appropriately. The transfusion should be abandoned if serious symptoms continue.

Delayed reactions can occur days to weeks post transfusion. All potential transfusion reactions should be reported immediately via the Pet Blood Bank website.

Storage: Fresh Frozen Plasma must be stored at -18°C or below. The lower the storage temperature, the more reliable the retention of coagulation factors within the product. Temperature stability is very important. Pet Blood Bank recommends continuous temperature monitoring of all storage areas. Temperatures must be recorded to ensure the product stays within the appropriate temperature range. Fresh Frozen Plasma should be stored separately from food or other possible contaminants, ideally in a dedicated plasma freezer.

Leakage: If leakage becomes apparent, the entire pack must be discarded.

Shelf life: Fresh Frozen Plasma has a shelf life of 1 year from the date of collection. The product label indicates the expiry date. Beyond this expiry date, the product can be relabelled, stored, and used as Frozen Plasma for a further 4 years. Blood products must not be administered to a patient after their expiry date (apart from as detailed above). Once expired, they should be discarded into clinical waste.

Non-Food Animal Blood Bank Authorisation: No. Abb30549/8000