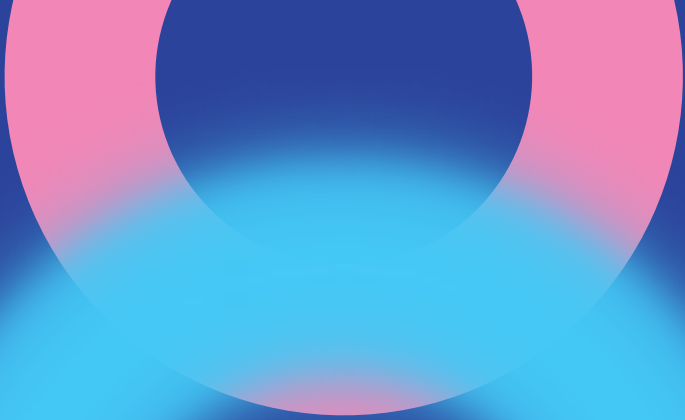




HAEMOTHERAPY

PRACTICE GUIDE



CATS-DOGS

3—8

Commitment

9—13

Packed Red Blood Cells

14—18

Plasma

19—23

Cryoprecipitate

24—28

Cryosupernatant

29—33

Platelet Concentrate

34—38

Platelet Gel

39—43

Ocular Plasma

44—48

Quality Control Requirements

49—56

Transfusion Reactions

59—62

Founding Partners



Canine



Feline



Storage temperature



For veterinary use only



Handle with care



Protect from direct sunlight



Gently mix before use



Sterile fluid inside

Commitment

Our blood bank is committed to delivering the highest quality in every aspect of this lifesaving service. We are dedicated to preparing and providing safe, effective blood products as quickly as possible, without ever compromising on the standards that protect both patients and those who so generously give them. At the very heart of everything we do, is a genuine respect for the welfare and best practices of our donor programme.





Safety

Every single unit released is tested for infectious agents by PCR and/or serology, in line with official veterinary guidelines. Combined with a rigorous, welfare-led selection of our blood donors and a comprehensive quality control blood component, these layered safeguards ensure the safety, reliability and clinical efficacy of the final product. Safety is never a single step — it is built into every stage of the journey, from the donor to the patient.

Animal Welfare

We love our blood donors, and their wellbeing will always come first. Our donation teams are specially trained in low-stress, cat-friendly and dog-friendly handling, making sure that every donor feels calm, safe and at ease, enjoys a friendly and reassuring atmosphere, and experiences a smooth, gentle and efficient donation. To every animal — and to every owner who chooses to help others — we will always be deeply and sincerely grateful.

Friendly Support

Our dedicated support team is always available to make sure that every step runs smoothly. You can rely on us at any moment, whether you need scientific and clinical guidance, or simple reassurance while we monitor the shipment of your blood unit. We are only a message away and glad to help.





Traceability

Every information is carefully recorded, from the moment of donation right through to shipment and delivery, ensuring complete, end-to-end traceability of all our blood bank activity. Each unit carries a unique identity linked to its donor, processing batch and full journey through our system. This level of traceability protects the safety of donors and patients, supports rapid investigation, and underpins the trust on which our service is built.

Cold Chain

Maintaining an unbroken cold chain prevents haemolysis and guarantees the quality and efficacy of every product we deliver. We rely on continuously monitored temperature-control devices, dedicated fridges and freezers, data loggers and validated shipment boxes.

Good Manufacturing Practices

All our processes follow Good Manufacturing Practice (GMP) principles, designed to mitigate risk and safeguard product quality at every step. This disciplined approach ensures an optimal, well-defined workflow, a clear delineation of responsibilities, accurate and fully auditable record-keeping, and the continuous monitoring of our manufacturing facilities.



Compassion
becomes medicine.

Packed Red Blood Cells



PACKED RED BLOOD CELLS



Name, form & presentation

Dog

ONERED Canine, 55-70%, intravenous solution for infusion 220 ml and 100 ml (volume tolerance -10% / +20%).

Cat

ONERED Feline, 40-55%, intravenous solution for infusion 15 ml (volume tolerance -10% / +20%).

A minimum of 90% of units tested should meet the required value.

Composition

Dog

Active ingredient: Canine erythrocytes with haematocrit between 55% and 70%.

Inactive ingredients: CPD (citrate, phosphate, dextrose), SAG-M (saline solution with mannitol, adenine and glucose), canine plasma.

Cat

Active ingredient: Feline erythrocytes with haematocrit between 40% and 55%.

Inactive ingredients: CPD (citrate, phosphate, dextrose), SAG-M (saline solution with mannitol, adenine and glucose), feline plasma.

Target species

Dog and Cat.

Indications

- It should be noted that the benefits of packed red blood cells are only transitory. Specific treatment of the primary pathology and supportive treatment is always required. Red blood cells transfusions are used to: **1)** treat symptomatic anaemias (regenerative and non-regenerative); **2)** to increase red blood cell count prior to anaesthesia in an anaemic patient, or prior to an expected bleeding procedure; **3)** to increase oxygenation during resuscitation in hypovolaemic shock; **4)** to improve platelet function in bleeding patients with thrombocytopenia and anaemia.

Dosage

- The total volume transfused should be 10 ml/kg/transfusion, which may be higher up to 20-30 ml/kg in cases of hypovolaemic shock. To ensure correct dosage, body weight should be determined as accurately as possible.
- After transfusion the patient should be reassessed to evaluate the need for additional transfusions. There is no specific desired post transfusion haematocrit; the goal should be the patient haemodynamic stabilization, which usually is achieved with 5-8% haematocrit increase.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Administration

- It is recommended that the rate of administration be slow (0.25 ml/kg/h) for the first 15–30 minutes to allow for the assessment of acute transfusion reactions. Following this period, the rate should be 5–10 ml/kg/h in normovolaemic dogs, or 3–5 ml/kg/h in cats. In animals at risk of volume overload (heart failure, renal failure or hypertension), the rate of administration should be 1–3 ml/kg/h.
- The unit should be left at room temperature for 15 minutes before administration. Quick active heating processes may cause haemolysis and should be avoided.
- Prior to commencing the transfusion, it is essential to gently shake the contents of each unit. In the event that the unit has been stored for a period exceeding 28 days or has been exposed to a breach in the cold chain during storage, it is recommended a quantitative or qualitative assessment of haemolysis. If it exceeds 1% in dogs or 1.5% in cats, the unit should not be used. It is recommended that an intravenous catheter be placed up to 24 hours before the transfusion.
- It is always required to use a dedicated administration system with filter. The use of an infusion pump approved for haemocomponent administration is recommended only in patients with less than 3 kg, as it may be associated with an increase in haemolysis.

Contraindications • Do not use in patients hypersensitive to the active or inactive ingredients.

Warnings

- It is recommended that blood compatibility tests be conducted in accordance with the recommendations set forth in specialized literature. Despite the implementation of such tests, the potential for adverse reactions remains.
- Do not use if the unit is damaged, perforated, leaking, has visible clots, dark discolouration or other signs of deterioration.

Precautions

- Always take the necessary precautions for the safe use of this product exclusively in target species.
- If the dosage exceeds 20 ml/kg/day, serum calcium levels should be monitored and supplemented if necessary.
- Blood pressure should also be carefully monitored to avoid volume overload reactions.
- In the event of self-administration, self-injection, or accidental ingestion, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.

PACKED RED BLOOD CELLS



- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled.
- This should be done in compliance with national requirements and any applicable national collection systems.

Side effects

Common (frequent), 1/10 to 1/100 transfused animals:

Febrile non-haemolytic reactions (FNHTR), transfusion-associated circulatory overload (TACO), transfusion associated dyspnoea (TAD), allergic reactions (pruritus, urticaria, vomiting, angioedema, anaphylaxis), acute immune-mediated haemolytic reactions.

Uncommon (infrequent), 1/100 to 1/1000 transfused animals:

Transfusion-related acute lung injury (TRALI), non-immune-mediated haemolytic reactions, transfusion-transmitted infection (TTI), bacterial contamination, citrate toxicity, delayed immune-mediated haemolytic reactions.

Very rare, < 1/10000 transfused animals:

Delayed serologic transfusion reactions (DSTR), hyperammonaemia, hypotensive transfusion reaction (HYTR).

The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary medicine. Should you observe any effects mentioned in this instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

Overdose

- In the event of an overdose, it is essential to monitor the presence of transfusion-related volume overload by measuring arterial pressures and investigate possible cardiac or pulmonary effects. Furthermore, monitoring serum calcium levels is crucial to identify and address any potential citrate intoxication.
- Side effects frequencies may also increase in the event of overdose.
- Cats, or young and old patients are especially exposed to overdose complications.

Interactions

- It is inadvisable to administer in the same intravenous route Lactated Ringer's solution, non-isotonic fluids or medicines in conjunction with this haemocomponent.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Storage and Shelf life

- Store between +2°C and +6°C for a maximum of 42 days. During transport, higher temperatures up to +10°C during 24 hours are acceptable. In case of temperature deviation, a haemolysis control should be performed before use.
- Do not freeze.
- Store in a dedicated fridge to avoid contamination and frequent temperature changes. Storage temperature should be permanently monitored by dataloggers.
- Store in the original blood bag and keep the external paper box to protect from damages and from the light.
- Protect from direct sunlight.
- Keep out of reach and sight of children.
- Do not use this veterinary medicinal product after the expiry date indicated in the label (after "EXPIRY").
- Depending on the storage conditions and its temperature fluctuations, the haemolysis may be higher than 1% before the expiry date. Thus, it is recommended to evaluate the haemolysis before use any unit stored for more than 28 days, if the cold chain is broken or if there is abnormal discolouration.

Additional information

- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box.
- Canine units are leucodepleted.
- After 28 days it is recommended to perform a haemolysis test before transfusion.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before transfusion, highlighting the risk of transfusion reactions and the remote chance of infectious agents transmission.
- This product should be used after medical prescription. Patients should be kept under veterinary surveillance during and up to 24 hours after transfusion at least.
- Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

plasma

Their life,
our mission.



PLASMA



Name, form & presentation

Dog

ONEPLAS Canine, 36-77 mg/ml, intravenous solution for perfusion 220 ml and 100 ml (volume tolerance -10% / +20%).

Cat

ONEPLAS Feline, 36-77 mg/ml, intravenous solution for perfusion 15 ml (volume tolerance -10% / +20%).

A minimum of 90% of units tested should meet the required value.

Composition

Dog

Active ingredient: Canine plasma with 36-77 mg/ml of dog plasma proteins.

Inactive ingredients: CPD (citrate, phosphate, dextrose).

Cat

Active ingredient: Feline plasma with 36-77 mg/ml of cat plasma proteins.

Inactive ingredients: CPD (citrate, phosphate, dextrose).

A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Target species

Dog and Cat.

Indications

- It should be noted that the benefits of plasma are only transitory. Specific treatment of the primary pathology and supportive treatment is always required.
- Plasma transfusions are used as an aid in increasing the level of albumin, immunoglobulins, clotting factors, and anti-inflammatory mediators in the following conditions: **1) Hypoalbuminaemia** (<1.5 g/dl + clinical signs, or <1.5 g/dl + invasive procedure) - Protein-losing enteropathy (IBD, neoplasia, lymphangiectasia, parvovirus infection, panleukopenia, hypoadrenocorticism, etc.), protein-losing nephropathy, hepatic disease, systemic inflammation processes (SIRS/Sepsis/DIC), vasculitis, third space fluid losses, or burns; **2) Coagulopathy** - Haemophilia A, Haemophilia B, von Willebrand disease (vWD), hypofibrinogenaemia, rodenticide/warfarin intoxication, hepatobiliary disease, or systemic inflammation processes (SIRS/Sepsis/DIC associated to severe trauma, gastric dilatation volvulus, heat stroke, systemic infection, generalized hypoxia/hypoperfusion, tissue necrosis, neoplasia or acute haemorrhagic diarrhoea syndrome); **3) Severe bleeding process** by trauma, neoplasia, surgery or spontaneous - haemorrhagic shock (blood loss > 30% of total blood volume) or refractory hypotension **4) Hypoglobulinaemia** (neonatal).

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Dosage

- The volume transfused should be 10 ml/kg/transfusion, which may be higher up to 20-30 ml/kg in cases of hypovolaemic shock with refractory hypotension.
- To increase albumin in 0.2 g/dL, a plasma transfusion of 10-20 ml/kg is required, meaning large volumes are needed in hypoalbuminaemia cases. To ensure correct dosage, body weight should be determined as accurately as possible.
- After transfusion the patient should be reassessed to evaluate the need for additional transfusions, which may be repeated every 6 to 24 hours considering the following goals (depending on the pathology): patient stabilization with symptoms improvement, bleeding control, clotting times decrease and/or albumin increase up to 2 g/dL.

Administration

- It is recommended that the rate of administration be slow (0.25 ml/kg/h) for the first 15-30 minutes to allow for the assessment of acute transfusion reactions. Following this period, the rate should be 5-10 ml/kg/h in normovolaemic dogs, or 3-5 ml/kg/h in cats.
- In animals at risk of volume overload (heart failure, renal failure or hypertension), the rate should be 1-3 ml/kg/h.
- Constant rate infusion 1.5-3 ml/kg/h can also be used over 24 hours. Before use, the unit should be thawed in a properly controlled environment at 37°C immediately after removal from storage; a water bath within a protective bag is usually used.
- It is not recommended to use a microwave.
- It is recommended that an intravenous catheter be placed up to 24 hours before the transfusion.
- It is always required to use a dedicated administration system with filter.
- The use of an infusion pump is always recommended.

Contraindications • Do not use if hypersensitive to the active or inactive ingredients.

Warnings

- It is recommended that blood compatibility tests be conducted in accordance with the recommendations set forth in specialized literature. In dogs there is no evidence to suggest that blood group compatibility reduces the risk of plasma transfusion reactions.
- Do not use if the unit is damaged, perforated, leaking, has visible clots/cells clusters, dark discolouration or other signs of deterioration. Light red colour is acceptable due to erythrocyte contamination during the laboratory processing, because a minimal quantity of free haemoglobin does not pose a risk to the patient.
- Fibrin presence is normal and may form flakes or gelatinous clots in suspension, which are retained in the filters.

PLASMA



Precautions

- Always take the necessary precautions for the safe use of this product exclusively in target species.
- If the dosage exceeds 20 mL/kg/day, serum calcium levels should be monitored and supplemented if necessary.
- Blood pressure should also be carefully monitored to avoid volume overload reactions.
- In the event of self-administration, self-injection, or accidental ingestion, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.
- It is imperative that frozen bags be handled with the utmost care, as they are susceptible to rupture.
- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled.
- This should be done in compliance with national requirements and any applicable national collection systems.

Side effects

Common (frequent), 1/10 to 1/100 transfused animals:

Transfusion-associated circulatory overload (TACO), transfusion associated dyspnoea (TAD), transfusion-related acute lung injury (TRALI), allergic reactions (pruritus, urticaria, vomiting, angioedema, anaphylaxis).

Uncommon (infrequent), 1/100 to 1/1000 transfused animals:

Febrile non-haemolytic reactions (FNHTR), transfusion-transmitted infection (TTI), bacterial contamination, citrate toxicity.

Very rare, < 1/10000 transfused animals:

Hyperammonaemia.

The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary medicine. Should you observe any effects mentioned in this instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

For any questions or concerns, please don't hesitate to contact us. Our technical support team includes licensed veterinarians.

Overdose

- In the event of an overdose, it is essential to monitor the presence of transfusion-related volume overload by measuring arterial pressures and investigate possible cardiac or pulmonary effects. Furthermore, monitoring serum calcium levels is crucial to identify and address any potential citrate intoxication.
- Side effects frequencies may also increase in the event of overdose.
- Cats, or young and old patients are especially exposed to overdose complications.

Interactions

- It is inadvisable to administer in the same intravenous route Lactated Ringer's solution or medicines in conjunction with this haemocomponent.

Storage and Shelf life

- Store frozen at $\leq -18^{\circ}\text{C}$, or lower, for a maximum of 5 years. After the first year of storage, labile clotting factors (V and VIII) may decrease its activity and therapeutic effect. For that reason it is named Fresh Frozen Plasma for some authors in the first year of storage. Once thawed, the component should not be refrozen and should be transfused as soon as possible. If delay is unavoidable, the component should be stored and used within 4 hours if maintained between $+20^{\circ}\text{C}$ and $+24^{\circ}\text{C}$, or up to 5 days if stored between $+2^{\circ}\text{C}$ and $+6^{\circ}\text{C}$, but it should be noted that extended post-thaw storage will result in a decline in the content of labile coagulation factors.
- Store in a dedicated freezer to avoid contamination and frequent temperature changes. Storage temperature should be permanently monitored by dataloggers.
- Store in the original blood bag and keep the external paper box to protect from damages and from the light.
- Protect from direct sunlight. Keep out of reach and sight of children.
- Do not use this veterinary medicinal product after the expiry date indicated in the label (after "EXPIRY").

Additional information

- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box.
- Canine units are leucodepleted.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before transfusion, highlighting the risk of transfusion reactions and the remote chance of infectious agents transmission.
- The use of pre-transfusion medicines does not reduce the risk of transfusion reactions. Unless there is a history of previous transfusion reactions, its use is not recommended.
- This product should be used after medical prescription. Patients should be kept under veterinary surveillance during and up to 24 hours after transfusion at least.
- Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Breaking frontiers,
delivering hope.

Cryo precipitate



CRYO PRECIPITATE



Name, form & presentation

Dog

ONECryoP Canine, 36-77 mg/ml, intravenous solution for perfusion 45 ml (volume tolerance -10% / +20%).

A minimum of 90% of units tested should meet the required value

Composition

Dog

Active ingredient: Canine cryoprecipitate with 36-77 mg/ml of dog sedimented cryoglobulin fraction of plasma. It contains the major portion of the factor VIII, von Willebrand factor, fibrinogen, factor XIII and fibronectin.

Inactive ingredients: CPD (citrate, phosphate, dextrose).

A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Target species

Dog.

Indications

- It should be noted that the benefits of cryoprecipitate are only transitory. Specific treatment of the primary pathology and supportive treatment is always required.
- Cryoprecipitate transfusions are used as an aid in increasing the level of factor VIII, von Willebrand factor, fibrinogen, factor XIII and fibronectin in the following conditions: **1)** Haemophilia A (factor VIII deficiency); **2)** von Willebrand disease (vWD); **3)** Hyperfibrinolysis and/or hypofibrinogenemia (e.g. trauma, DIC or hepatopathy).

Dosage

- The volume transfused should be 4-5 ml/kg/transfusion single dose or every 12-24 hours (depending on the condition severity), which may be higher up to 20-30 ml/kg in cases of hypovolaemic shock with refractory hypotension.
- For treatments before surgery, better transfuse in the last 4 hours. For highly invasive procedures, repeat every 30 minutes.

Administration

- It is recommended that the rate of administration be slow (0.25 ml/kg/h) for the first 15-30 minutes to allow for the assessment of acute transfusion reactions. Following this period, as cryoprecipitate may be a viscous solution, rates of 2-4 ml/kg/h should be used. If there is higher risk of volume overload, infusion rate should be 1 ml/kg/h and gradually increased if there are no transfusion reactions signs.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

- Before use, the unit should be thawed in a properly controlled environment at 37°C immediately after removal from storage; a water bath within a protective bag is usually used. It is not recommended to use a microwave.
- Dissolution of the precipitate should be encouraged by careful manipulation during the thawing procedure.
- It is recommended that an intravenous catheter be placed up to 24 hours before the transfusion.
- It is always required to use a dedicated administration system with filter.
- The use of an infusion pump is always recommended.

Contraindications • Do not use if hypersensitive to the active or inactive ingredients.

Warnings

- It is recommended that blood compatibility tests be conducted in accordance with the recommendations set forth in specialized literature. There is no evidence to suggest that blood group compatibility reduces the risk of cryoprecipitate transfusion reactions.
- Do not use if the unit is damaged, perforated, leaking, has visible clots/cells clusters, dark discolouration or other signs of deterioration. Light red colour is acceptable due to erythrocyte contamination during the laboratory processing, because a minimal quantity of free haemoglobin does not pose a risk to the patient.

Precautions

- Always take the necessary precautions for the safe use of this product exclusively in dogs.
- In the event of self-administration, self-injection, or accidental ingestion, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.
- It is imperative that frozen bags be handled with the utmost care, as they are susceptible to rupture.
- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled.
- This should be done in compliance with national requirements and any applicable national collection systems.

CRYO PRECIPITATE



Side effects

Common (frequent), 1/10 to 1/100 transfused animals:

Transfusion-associated circulatory overload (TACO), transfusion associated dyspnoea (TAD), transfusion-related acute lung injury (TRALI), allergic reactions (pruritus, urticaria, vomiting, angioedema, anaphylaxis).

Uncommon (infrequent), 1/100 to 1/1000 transfused animals:

Febrile non-haemolytic reactions (FNHTR), transfusion-transmitted infection (TTI), bacterial contamination, citrate toxicity.

Very rare, < 1/10000 transfused animals:

Hyperammonaemia.

The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary medicine. Should you observe any effects mentioned in this instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

Overdose

- In the event of an overdose, the high safety margin means that intoxication is highly unlikely. In the event of an overdose, it is essential to monitor the presence of transfusion-related volume overload by measuring arterial pressures and investigate possible cardiac or pulmonary effects. Furthermore, monitoring serum calcium levels is crucial to identify and address any potential citrate intoxication.
- Side effects frequencies may also increase in the event of overdose. Young and old patients are especially exposed to overdose complications.

Interactions

- It is inadvisable to administer in the same intravenous route Lactated Ringer's solution or medicines in conjunction with this haemocomponent.

Storage and Shelf life

- Store at $\leq -18^{\circ}\text{C}$, or lower, for a maximum of 1 year.
- In order to preserve labile factors, cryoprecipitate should be used as soon as possible following thawing. It should not be refrozen.
- Store in a dedicated freezer to avoid contamination and frequent temperature changes.
- Storage temperature should be permanently monitored by dataloggers. Store in the original blood bag and keep the external paper box to protect from damages and from the light.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

- Protect from direct sunlight.
- Keep out of reach and sight of children.
- Do not use this veterinary medicinal product after the expiry date indicated in the label (after "EXPIRY").

Additional information

- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box.
- Cryoprecipitate units are leucodepleted.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before transfusion, highlighting the risk of transfusion reactions and the remote chance of infectious agents transmission.
- The use of pre-transfusion medicines does not reduce the risk of transfusion reactions. Unless there is a history of previous transfusion reactions, its use is not recommended.
- This product should be used after medical prescription. Patients should be kept under veterinary surveillance during and up to 24 hours after transfusion at least.
- Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Cryo superant

One blood.
One purpose.



CRYO SUPERNATANT



Name, form & presentation

Dog

ONECryoS Canine, 36-77 mg/ml, intravenous solution for perfusion 200 ml (volume tolerance $\pm 20\%$).

A minimum of 90% of units tested should meet the required value.

Composition

Dog

Active ingredient: Canine cryosupernatant with 36-77 mg/ml of dog supernatant fraction of plasma, prepared from frozen plasma by the removal of the cryoprecipitate. The composition of this product is identical to that of plasma, with the exception of a notable reduction in the levels of fibrinogen, fibronectin, von Willebrand factor and the labile factors VIII and XIII.

Inactive ingredients: CPD (citrate, phosphate, dextrose).

A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Target species

Dog.

Indications

- It should be noted that the benefits of cryosupernatant are only transitory. Specific treatment of the primary pathology and supportive treatment is always required. Cryosupernatant transfusions are used as an aid in increasing the level of albumin, immunoglobulins, clotting factors (except factor VIII and XIII), and anti-inflammatory mediators in the following conditions: **1) Hypoalbuminaemia** (<1.5 g/dl + clinical signs, or <1.5 g/dl + invasive procedure) - Protein-losing enteropathy (IBD, neoplasia, lymphangiectasia, parvovirus infection, panleukopenia, hypoadrenocorticism, etc.), protein-losing nephropathy, hepatic disease, systemic inflammation processes (SIRS/Sepsis), vasculitis, third space fluid losses, or burns;
- 2) Coagulopathy** - haemophilia B, rodenticide/warfarin intoxication, hepatobiliary disease, or systemic inflammation processes (SIRS/Sepsis associated to severe trauma, gastric dilatation volvulus, systemic infection, generalized hypoxia/hypoperfusion, tissue necrosis, neoplasia or acute haemorrhagic diarrhoea syndrome);
- 3) Severe bleeding process** by trauma, neoplasia, surgery or spontaneous - haemorrhagic shock (blood loss $>30\%$ of total blood volume) or refractory hypotension; **4) Hypoglobulinaemia** (neonatal).

Dosage

- The volume transfused should be 10 ml/kg/transfusion, which may be higher up to 20-30 ml/kg in cases of hypovolaemic shock with refractory hypotension.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

- To increase albumin in 0.2 g/dl, a cryosupernatant transfusion of 10-20 ml/kg is required, meaning large volumes are needed in hypoalbuminaemia cases. To ensure correct dosage, body weight should be determined as accurately as possible.
- After transfusion the patient should be reassessed to evaluate the need for additional transfusions, which may be repeated every 6 to 24 hours considering the following goals (depending on the pathology): patient stabilization with symptoms improvement, bleeding control, clotting times decrease and/or albumin increase up to 2 g/dl.

Administration

- It is recommended that the rate of administration be slow (0.25 ml/kg/h) for the first 15-30 minutes to allow for the assessment of acute transfusion reactions. Following this period, the rate should be 5-10 ml/kg/h in normovolaemic dogs.
- In animals at risk of volume overload (heart failure, renal failure or hypertension), the rate should be 1-3 ml/kg/h.
- Constant rate infusion 1.5-3 ml/kg/h can also be used over 24 hours.
- Before use, the unit should be thawed in a properly controlled environment at 37°C immediately after removal from storage; a water bath within a protective bag is usually used. It is not recommended to use a microwave.
- It is recommended that an intravenous catheter be placed up to 24 hours before the transfusion.
- It is always required to use a dedicated administration system with filter.
- The use of an infusion pump is always recommended.

Contraindications • Do not use if hypersensitive to the active or inactive ingredients.

Warnings

- It is recommended that blood compatibility tests be conducted in accordance with the recommendations set forth in specialized literature. There is no evidence to suggest that blood group compatibility reduces the risk of cryosupernatant transfusion reactions.
- Do not use if the unit is damaged, perforated, leaking, has visible clots/cells clusters, dark discolouration or other signs of deterioration. Light red colour is acceptable due to erythrocyte contamination during the laboratory processing, because a minimal quantity of free haemoglobin does not pose a risk to the patient.
- Fibrin content may form flakes or gelatinous clots in suspension, which are retained in the filters.

CRYO SUPERNATANT



Precautions

- Always take the necessary precautions for the safe use of this product exclusively in dogs.
- If the dosage exceeds 20 ml/kg/day, serum calcium levels should be monitored and supplemented if necessary. Blood pressure should also be carefully monitored to avoid volume overload reactions.
- In the event of self-administration, self-injection, or accidental ingestion, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.
- It is imperative that frozen bags be handled with the utmost care, as they are susceptible to rupture.
- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled.
- This should be done in compliance with national requirements and any applicable national collection systems.

Side effects

Common (frequent), 1/10 to 1/100 transfused animals:

Transfusion-associated circulatory overload (TACO), transfusion associated dyspnoea (TAD), transfusion-related acute lung injury (TRALI), allergic reactions (pruritus, urticaria, vomiting, angioedema, anaphylaxis).

Uncommon (infrequent), 1/100 to 1/1000 transfused animals:

Febrile non-haemolytic reactions (FNHTR), transfusion-transmitted infection (TTI), bacterial contamination, citrate toxicity.

Very rare, < 1/10000 transfused animals:

Hyperammonaemia.

The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary medicine. Should you observe any effects mentioned in this instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Overdose

- In the event of an overdose, it is essential to monitor the presence of transfusion-related volume overload by measuring arterial pressures and investigate possible cardiac or pulmonary effects. Furthermore, monitoring serum calcium levels is crucial to identify and address any potential citrate intoxication.
- Side effects frequencies may also increase in the event of overdose. Young and old patients are especially exposed to overdose complications.

Interactions

- It is inadvisable to administer in the same intravenous route Lactated Ringer's solution or medicines in conjunction with this haemocomponent.

Storage and Shelf life

- Store at $\leq -18^{\circ}\text{C}$, or lower, for a maximum of 5 years.
- Once thawed, the component should not be refrozen and should be transfused as soon as possible. If delay is unavoidable, the component should be stored and used within 4 hours if maintained between $+20^{\circ}\text{C}$ and $+24^{\circ}\text{C}$, or up to 5 days if stored between $+2^{\circ}\text{C}$ and $+6^{\circ}\text{C}$, but it should be noted that extended post-thaw storage will result in a decline in the content of labile coagulation factors.
- Store in a dedicated freezer to avoid contamination and frequent temperature changes. Storage temperature should be permanently monitored by dataloggers.
- Store in the original blood bag and keep the external paper box to protect from damages and from the light. Protect from direct sunlight.
- Keep out of reach and sight of children.
- Do not use this veterinary medicinal product after the expiry date indicated in the label (after "EXPIRY").

Additional information

- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box.
- Cryosupernatant units are leucodepleted.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before transfusion, highlighting the risk of transfusion reactions and the remote chance of infectious agents transmission.
- The use of pre-transfusion medicines does not reduce the risk of transfusion reactions. Unless there is a history of previous transfusion reactions, its use is not recommended.
- This product should be used after medical prescription. Patients should be kept under veterinary surveillance during and up to 24 hours after transfusion at least.
- Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Platelet Concentrate

The best out of every
drop of blood



PLATELET CONCENTRATE



2° – 6°C



Name, form & presentation

Dog

ONEPLAT Canine, 0.3×10^{11} platelets/unit, intravenous solution for perfusion.
50 ml (volume tolerance -10% / +20%).

A minimum of 90% of units tested should meet the required value.

Composition

Dog

Active ingredient: Canine platelets, with minimum of 0.3×10^{11} platelets per unit, prepared by the buffy coat method from one or more whole blood units.

Inactive ingredients: CPD (citrate, phosphate, dextrose and canine plasma).

A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Target species

Dog.

Indications

- It should be noted that the benefits of platelets transfusions are only transitory. Specific treatment of the primary pathology and supportive treatment is always required.
- Platelet concentrate transfusions are used as an aid in increasing the level of platelets in the following conditions:
 - 1) *Thrombocytopenias* - caused by a number of factors, including immune-mediated processes, infectious agents (e.g. Ehrlichia and Anaplasma), DIC, neoplasia or bone marrow pathologies;
 - 2) *Thrombocytopathies* - acquired processes (induced by NSAIDs, clopidogrel, uraemia or hepatopathy) or congenital diseases.
- In cases of immune-mediated thrombocytopenia, platelets transfusion is only recommended in instances of non controlled bleeding, as it is anticipated that transfused platelets will be rapidly destroyed.
- It is recommended that patients with some of the previous conditions who are to undergo surgery, endoscopy, biopsy or any other invasive procedures, be given a prophylactic platelet transfusion if the platelet count is below 80×10^3 platelets/ μ L. With the exception of these previous patients, the administration of platelet concentrate is recommended only in patients with active bleeding.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Dosage

- The volume transfused should be 1 unit/10kg.
- To ensure correct dosage, body weight should be determined as accurately as possible.
- After transfusion the patient should be reassessed to evaluate the need for additional transfusions, which may be repeated every 8 to 24 hours until the bleeding process is controlled. Platelet count is not an accurate predictor of the transfusion efficacy.

Administration

- It is recommended that the rate of administration be slow (0.25 ml/kg/h) for the first 15-30 minutes to evaluate possible acute transfusion reactions. Following this period, the rate should be 5 ml/kg/h in normovolaemic dogs. In animals at risk of volume overload (heart failure, renal failure or hypertension), the rate should be 1-3 ml/kg/h.
- It is recommended that an intravenous catheter be placed up to 24 hours before the transfusion.
- The unit should be left at room temperature for 15 minutes before administration.
- Prior to commencing the transfusion, it is essential to gently shake the contents of each unit.
- It is always required to use a dedicated administration system with filter.
- The use of an infusion pump approved for haemocomponent administration is recommended only in patients with less than 3 kg, as it may be associated with platelet destruction or pre-activation.

Contraindications • Do not use if hypersensitive to the active or inactive ingredients.

Warnings

- It is recommended that blood compatibility tests be conducted in accordance with the recommendations set forth in specialized literature. There is no evidence to suggest that blood group compatibility reduces the risk of platelet transfusion reactions.
- As it is impossible to type for platelets or plasma protein antigens, one can not predict immune-mediated reactions. Always monitor patients closely during and after transfusions.
- Do not use if the unit is damaged, perforated, leaking, has visible clots/cells clusters, dark discolouration or other signs of deterioration. Light red colour is acceptable due to erythrocyte contamination during the laboratory processing, because a minimal quantity of erythrocytes or free haemoglobin does not pose a risk to the patient.

PLATELET CONCENTRATE



2° – 6°C



Precautions

- Always take the necessary precautions for the safe use of this product exclusively in dogs.
- If the dosage exceeds 20 ml/kg/day, serum calcium levels should be monitored and supplemented if necessary. Blood pressure should also be carefully monitored to avoid volume overload reactions.
- In the event of self-administration, self-injection, or accidental ingestion, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.
- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled. This should be done in compliance with national requirements and any applicable national collection systems.

Side effects

Common (frequent), 1/10 to 1/100 transfused animals:

Febrile non-haemolytic reactions (FNHTR), transfusion-associated circulatory overload (TACO), transfusion associated dyspnoea (TAD), allergic reactions (pruritus, urticaria, vomiting, angioedema, anaphylaxis).

Uncommon (infrequent), 1/100 to 1/1000 transfused animals:

Transfusion-related acute lung injury (TRALI), transfusion-transmitted infection (TTI), bacterial contamination, citrate toxicity.

Very rare, < 1/10000 transfused animals:

Hyperammonaemia, post-transfusion purpura (PTP).

The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary medicine. Should you observe any effects mentioned in this instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

Overdose

- In the event of an overdose, it is essential to monitor the presence of transfusion-related volume overload by measuring arterial pressures and investigate possible cardiac or pulmonary effects. Furthermore, monitoring serum calcium levels is crucial to identify and address any potential citrate intoxication.
- Side effects frequencies may also increase in the event of overdose. Young and old patients are especially exposed to overdose complications.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Interactions

- It is inadvisable to administer in the same intravenous route Lactated Ringer's solution or medicines in conjunction with this haemocomponent.

Storage and Shelf life

- Store fresh platelet concentrate between 2-6°C, for a maximum of 14 days.
- Storage temperature should be permanently monitored by dataloggers.
- Store in the original blood bag and keep the external paper box to protect from damages and from the light.
- Protect from direct sunlight.
- Keep out of reach and sight of children.
- Do not use this veterinary medicinal product after the expiry date indicated in the label (after "EXPIRY").

Additional information

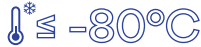
- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box.
- Platelet units are not leucodepleted.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before transfusion, highlighting the risk of transfusion reactions and the remote chance of infectious agents transmission.
- The use of pre-transfusion medicines does not reduce the risk of transfusion reactions. Unless there is a history of previous transfusion reactions, its use is not recommended.
- This product should be used after medical prescription. Patients should be kept under veterinary surveillance during and up to 24 hours after transfusion at least.
- Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Platalet Gel

One for all,
all for life



PLATELET GEL



Name, form & presentation

Dog

ONEPLAT GEL Canine, 0.1×10^{11} platelets lysate/unit, gel for topical application 15 ml (volume can vary by 20%).

Supplied as a frozen platelet concentrate lysate unit accompanied by a vial of 10% calcium gluconate for gel activation prior to use.

Composition

Dog

Active ingredient: Canine platelet lysate obtained from one platelet concentrate, rich in platelet growth factors (PDGF, TGF- β , EGF, VEGF, bFGF and IGF-1).

Inactive ingredients: CPD (citrate, phosphate, dextrose) and canine plasma.

A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Activation: 10% calcium gluconate, added at 10% of the unit volume to induce gel formation.

Target species

Dog.

Indications

Platelet gel promotes the regeneration of hard and soft tissues. It is used in external and complex lesions and in those unresponsive to conventional treatment:

- Chronic decubital (pressure) ulcers;
- Other lesions secondary to neuropathy or to vasculitis;
- Bone healing / osteotomies (TPLO/HTO);
- Bone defects / ostectomy.

Other applications in humans without clinical reports in dogs:

- Split-thickness skin graft donor sites and burns — faster epithelialization
- Anal/perianal fistula
- General/abdominal surgical wounds — infection/dehiscence prophylaxis
- Alveolar/palatal cleft grafting
- Spinal fusion/arthrodesis

The high concentration of platelet growth factors exerts a chemotactic effect on endothelial and mesenchymal cells (fibroblasts, osteoblasts, chondrocytes, muscle cells), producing greater collagen synthesis, cell proliferation, angiogenesis and restored microcirculation, with an anabolic effect that promotes the repair of tendons, ligaments, muscle and cutaneous wounds.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Dosage

- The amount of gel applied depends on the extent and depth of the lesion, using the quantity required to fully cover the wound bed and margins. One unit (15 ml) is generally sufficient for a medium-sized lesion; larger lesions may require more than one unit. To ensure correct application, the lesion should be assessed as accurately as possible.
- Applications should be repeated every 3–4 days until wound resolution (usually 4–8 weeks). This protocol may be adjusted according to the individual response and injury characteristics. If there is no response within 3–4 weeks, the treatment should be stopped.

Administration

Platelet gel is for topical / local application over the lesion; it is not administered by transfusion.

- **Preparation:** remove the unit from the freezer and allow it to thaw in a water bath at 30–35 °C for 10 minutes. Using a syringe and needle, add through the rubber opening a volume of 10% calcium gluconate corresponding to 10% of the unit volume. Stir gently for 60 seconds and leave at room temperature or at 37 °C. A gel will form in 5–10 minutes and the bag volume will increase; a small portion may remain liquid.
- Aseptically cut the bag to remove the gel and apply it over the wound; cover with a hydrophobic bandage. Alternatively, in a sterile environment, the unit may be transferred to a sterilised bowl after thawing and the calcium gluconate added there. The gel should be applied within the first hour after gelling.
- Before application, dead tissue should be removed and the wound borders may need to be surgically reopened for proper effect.

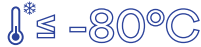
Contraindications • Do not use if hypersensitive to the active or inactive ingredients.

- Do not apply to infected lesions; these should be treated first and the platelet gel applied only after the infection has cleared.
- Do not apply platelet gel over neoplastic lesions or when there is disseminated neoplasia.

Warnings

- Blood typing and crossmatch are not required for platelet gel application.
- Do not use if the unit is damaged, perforated, leaking, has dark discolouration or other signs of deterioration. Light red colour is acceptable due to erythrocyte contamination during laboratory processing, because a minimal quantity of free haemoglobin does not pose a risk to the patient.

PLATELET GEL



- Tissue hypoxia limits the platelet gel effect — tissue oxygenation should be a major concern. The effect of platelet gel application in patients with viraemia is unknown.

Precautions

- Always take the necessary precautions for the safe use of this product exclusively in dogs.
- It is imperative that frozen bags be handled with the utmost care, as they are susceptible to rupture.
- In the event of self-administration, self-injection, or accidental contact, it is imperative to seek immediate medical attention and present the label to the attending physician.
- The safety of this product has not been determined during pregnancy and lactation, however no specific reports of incompatibilities or side effects are described in specialized bibliography.
- Special precautions for environmental protection: always discharge material in contact with haemocomponent on a dedicated container for biological waste. External paper package or shipping material should be reused or recycled. This should be done in compliance with national requirements and any applicable national collection systems.

Side effects

- As platelet gel is applied topically, systemic transfusion reactions are not expected and local reactions are rare. To date, no adverse reactions have been reported, including in feline patients treated with canine platelet gel.
- The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary product. Should you observe any effects mentioned in these instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

Overdose

- As platelet gel is applied topically, systemic overdose is highly unlikely. Excessive or too-frequent application does not improve the outcome and should be avoided.

Interactions

- No relevant interactions have been described. Avoid applying, on the same site, topical agents that may interfere with gel formation or with growth factor activity.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Storage and Shelf life

- Store frozen at a temperature of $\leq -80^{\circ}\text{C}$ for a maximum of 2 years.
- Handle frozen bags carefully, as they rupture easily. Store in a dedicated freezer to avoid contamination and frequent temperature changes. Storage temperature should be permanently monitored by dataloggers. Avoid opening the freezer too often, as a temperature increase may quickly thaw the unit.
- Once thawed and gelled, the component should be applied within the first hour and should not be refrozen. Store in the original blood bag and keep the external paper box to protect from damages and from the light.
- Protect from direct sunlight. Keep out of reach and sight of children. Do not use this veterinary product after the expiry date indicated on the label (after "EXPIRY").

Additional information

- The product packaging is a sterile PVC-DEHP blood bag protected by a cardboard box, accompanied by a vial of 10% calcium gluconate for activation.
- Platelet gel must be used in dogs. Canine platelet gel has been used successfully in feline patients, with no reported adverse reactions; nevertheless, further research is needed to ensure the safety of this procedure.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before treatment.
- This product should be used after medical prescription and under veterinary supervision. Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Science. Care.
Responsibility.

Ocular Plasma



OCULAR PLASMA



Name, form & presentation

Dog

EYE ONEPLAS Canine, blood-derived plasma eye drops (topical ophthalmic solution); presented in a box of 8 vials of 1.5 ml each.

Cat

EYE ONEPLAS Feline, blood-derived plasma eye drops (topical ophthalmic solution); presented in a box of 8 vials of 1.5 ml each.

Supplied frozen in sterile vials units, prepared from screened allogeneic (heterologous) donor plasma in a closed system.

Composition

Dog

Active ingredient: Allogeneic canine or feline plasma, providing α2-macroglobulin (broad-spectrum anti-protease / anti-collagenase), fibronectin, albumin, vitamin A, immunoglobulins and growth factor IGF-1.

Inactive ingredients: CPD (citrate, phosphate, dextrose). A small amount of erythrocyte fragments responsible may induce plasma red pigmentation. It confers no risk to the patient due to the small amount of free haemoglobin.

Target species

Dog and Cat.

Indications

Adjuvant treatment of ocular surface disease in dogs and cats, particularly where epitheliotrophic support and anti-collagenase (anti-melting) activity are required. Blood-derived eye drops act by supplying epithelial growth factors, fibronectin, vitamin A and protease inhibitors to the avascular ocular surface.

Dog

- Keratoconjunctivitis sicca (KCS / dry eye);
- Spontaneous chronic corneal epithelial defects (SCCED / indolent ulcers);
- Melting ulcers / keratomalacia (anti-collagenase rationale);
- Deep or infected corneal ulcers (as adjuvant).

Cat

- Feline herpesvirus-1 (FHV-1) keratitis and ulcers;
- Corneal sequestrum;
- Eosinophilic keratitis;
- Melting ulcers and (less commonly) feline dry eye.

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Dosage

- One drop onto the affected eye every 1–2 hours during the acute phase of melting / actively progressing ulcers, reducing to every 4–6 hours as the condition improves. The frequency should be adjusted to the indication and clinical response.
- Blood-derived eye drops are an adjuvant to the remaining ophthalmic therapy and do not replace specific treatment of the primary disease.

Administration

For topical ocular use only. The product is instilled onto the ocular surface; it is not administered by injection or transfusion.

- **Preparation for use:** thaw a single-dose unit at room temperature immediately before use. Do not apply active / quick heating — the labile plasma proteins and vitamin A degrade with heat. While in use, keep the vial refrigerated at 2–6 °C and protected from light.
- Instil one drop onto the affected eye at the prescribed frequency. When several topical medications are used, space the applications by a few minutes. Discard the in-use vial within 72 hours to minimise microbiological risk.

Contraindications

- Do not use if the unit is haemolysed, discoloured, turbid, or shows any sign of microbial contamination or deterioration.
- **Cat:** avoid type B donor plasma in type A recipients, as feline type B plasma carries high-titre of anti-A alloantibodies (see Precautions).

Warnings

- Topical use is not a transfusion. The haemolytic risk of transfusion does not transfer to a topical, acellular plasma applied to the avascular, immune-privileged ocular surface; no clinically relevant immunogenic reaction to topical allogeneic blood-derived products has been documented in humans or animals.
- Patient crossmatch is not required for topical ocular use, only blood typing.
- Do not use if the unit is damaged, perforated, leaking, or shows abnormal colour or turbidity.

OCULAR PLASMA



Precautions

- Ensure aseptic technique, as it is the single most impactful measure to reduce microbial contamination.
- Protect from light — vitamin A is photosensitive. Keep the in-use vial refrigerated and discard within 72 hours.
- **Cat:** ensure AB blood type compatibility. Because plasma — unlike serum — carries the donor's alloantibodies, type B plasma should be avoided in type A recipients.
- The safety of this product has not been specifically determined during pregnancy and lactation; however, no specific reports of topical incompatibility or side effects are described in specialized bibliography.
- Special precautions for environmental protection: always discharge material in contact with blood components in a dedicated container for biological waste, in compliance with national requirements.

Side effects

- Blood-derived eye drops are very well tolerated across species. No clinically relevant immunogenic reactions have been reported for topical allogeneic use; transient mild ocular irritation or hyperaemia is rare. The main theoretical risk is microbial contamination of the in-use vial, mitigated by closed-system preparation, refrigeration, light protection and 72-hour discard.
- The reporting of adverse events is of significant importance as it permits the continuous monitoring of the safety of a veterinary product. Should you observe any effects mentioned in these instructions or other effects, even if not mentioned, or should you believe that this product has not been effective, you are encouraged to inform OneBlood.

Overdose

- As a topical product, systemic overdose is highly unlikely. Increasing the instillation frequency beyond that indicated does not improve the outcome and should be avoided.

Interactions

- When used together with other topical ophthalmic medications, space the applications by a few minutes to avoid dilution and wash-out. Antibiotic additives (e.g. dilution in chloramphenicol) may reduce the epitheliotropic capacity of the product; modern practice prefers aseptic technique without added preservatives.



For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

Storage and Shelf life

- Store single-dose aliquots frozen at $\leq -18^{\circ}\text{C}$ for 6 months. Store at $\leq -80^{\circ}\text{C}$ for 12 months.
- In-use vial: keep refrigerated ($+2-6^{\circ}\text{C}$), protected from light, and discard within 72 hours. Avoid room temperature and freeze-thaw cycles.
- Protect from direct sunlight. Keep out of reach and sight of children. Storage temperature should be permanently monitored by dataloggers. Do not use this product after the expiry date indicated on the label (after "EXPIRY").

Additional information

- Prepared from allogeneic donor plasma in a closed system under laminar flow, with per-batch microbiological control.
- Every unit is tested for infectious agents according to official guidelines for veterinary blood banks. However, an informed consent should be signed by the patient owner before treatment.
- Evidence positioning: safe and consistently well tolerated, with an adjuvant role. There is not yet a dedicated veterinary controlled trial of heterologous plasma or PRGF (Plasma Rich in Growth Factors) eye drops in dogs or cats — a real evidence gap.
- The product packaging is a sterile vial protected by a cardboard box.
- This product should be used after medical prescription and under veterinary supervision. Donor welfare is ensured during the blood donation process, by a super friendly, dedicated and well-trained team.

Quality Control Requirements





QUALITY CONTROL REQUIREMENTS

	Parameters to be checked	Requirements		Frequency of control
Packed red Blood Cells	Volume	Dog	100/220 ml (-10% / +20%)	All units
		Cat	15 ml (-10% / +20%)	
	Haematocrit	Dog	55-70%	One every 5 units
		Cat	40-55%	
	Infectious agents	Dog	Negative for <i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Babesia</i> spp., <i>Leishmania</i> spp., <i>Brucella</i> spp. and <i>Dirofilaria immitis</i> (PCR/serology)	Annually
		Cat	Negative for FIV, FeLV (RNA and Provirus), <i>Mycoplasma haemofelis</i> , <i>Mycoplasma haemominutum</i> , <i>Mycoplasma turicensis</i> and <i>Bartonella henselae</i> (PCR/serology)	All units
	Haemolysis	Dog	≤ 1%	One every 10 units after production and All units shipped after 28 days of storage
		Cat	≤ 1.5%	
	Visual changes	Dog and cat	No abnormal colour or visible clots	All units
	Bacterial contamination	Dog and cat	No bacterial growth	One every 10 units (increased frequency if needed)
	Residual leucocytes per final unit	Dog	< 12×10 ⁹ /unit	One every 10 units
Platelet Concentrate	Volume	Dog	50 ml (-10% / +20%)	All units
	Platelet content	Dog	> 0.3×10 ¹¹ platelets/unit	All units
	Infectious agents	Dog	Negative for <i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Babesia</i> spp., <i>Leishmania</i> spp., <i>Brucella</i> spp. and <i>Dirofilaria immitis</i> (PCR/serology)	Annually
	Visual changes	Dog	No abnormal colour or visible clots	All units
	Bacterial contamination	Dog	No bacterial growth	All units

A minimum of 90% of units tested should meet the required value.



For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.

	Parameters to be checked	Requirements		Frequency of control
Plasma	Volume	Dog	100/220 ml (-10% / +20%)	All units
		Cat	15 ml (-10% / +20%)	
	Residual cells	Dog and cat	RBC < 6x10 ⁹ /L	One every 10 units
			WBC < 0.1x10 ⁹ /L	
			PLT < 50x10 ⁹ /L	
	Infectious agents	Dog	Negative for <i>Ehrlichia</i> spp., <i>Anaplasma</i> spp., <i>Babesia</i> spp., <i>Leishmania</i> spp., <i>Brucella</i> spp. and <i>Dirofilaria immitis</i> (PCR/serology).	Annually
		Cat	Negative for FIV, FeLV (RNA and Provirus), <i>Mycoplasma haemofelis</i> , <i>Mycoplasma haemominutum</i> , <i>Mycoplasma turicensis</i> and <i>Bartonella henselae</i> (PCR/serology).	All units
	Total protein	Dog and cat	36-77 mg/ml	One every 10 units
Visual changes	Dog and cat	No abnormal colour or visible clots	All units	
Leakage	Dog and cat	No leakage in any part of the unit. Requires visual inspection after pressure before freezing.	All units	
Cryo P	As indicated for Plasma except for the following parameter			
	Volume	Dog	45 ml (-10% / +20%)	All units
Cryo S	As indicated for Plasma except for the following parameter			
	Volume	Dog	200 ml (±20%)	All units

A minimum of 90% of units tested should meet the required value.

COMPATIBILITY TESTS

	DOGS		CATS	
	First transfusion + Subsequent ones within 4 days	Subsequent transfusions after 4 days	First transfusion + Subsequent ones within 48 hours	Subsequent transfusions after 48 hours
Packed Red Blood Cells	Strongly Recommended. No Acute Haemolytic Reactions have been reported following a DEA 1 mismatched transfusion. <i>If blood typed has not been performed, save a sample from the patient prior to transfusion for subsequent blood typing.</i> <i>In order to ensure sustainable use of blood resources it is important NOT use DEA 1 negative units in untyped patients.</i>	All patients should be blood typed to avoid severe Acute Haemolytic Transfusion Reactions. <i>Samples of patients with previous DEA 1 positive transfusion history, should not be used for blood typing for up to 3 months (risk of false DEA 1 posttyping).</i>	Yes, because cats present natural antibodies responsible for severe haemolytic reactions in AB system mismatched transfusions, even in the first transfusion. Type AB cats can receive type A pRBC if type AB is unavailable.	
	It is not necessary	Yes, it is recommended that major crossmatching be performed alongside type matching.	It is suggested major crossmatching be performed alongside type matching, but there is very low risk of haemolytic reaction if only blood type is ensured.	Yes, it is strongly recommended that major crossmatching be performed alongside type matching.
Plasma	It is not necessary. There is insufficient evidence available to make recommendations regarding the use of DEA type specific plasma.	Yes, AB typing is strongly recommended. Type AB plasma is universal (no natural antibodies).		
	It is not necessary. Units does not contain antibodies anti-RBC because blood donors previous transfused are not accepted. Also, residual RBC presented in plasma does not seem to have clinical relevance.	It is not necessary. If AB typing is not available, minor crossmatching is recommended.		
Platelet Concentrate	It is not necessary.			
	It is not necessary.			

Cryoprecipitate (ONECryoP Canine) & Cryosupernatant (ONECryoS Canine)

Same recommendations indicated for plasma

For any questions or concerns, please don't hesitate to contact us.
Our technical support team includes licensed veterinarians.



Transfusions are lifesaving, but no blood product is entirely without risk. A transfusion reaction is any unintended response in a patient associated with the transfusion of blood or a blood component. Most are mild and self-limiting; a minority are life-threatening.



Why correct identification matters

In a recent multicentre study, of the transfusions that were discontinued because a reaction was suspected, 46% did not in fact fulfil TRACS criteria for any transfusion reaction. Misidentifying a reaction leads to unnecessary interruption or discard of a scarce, lifesaving product.

46%

of reported transfusion reactions did not fulfil TRACS criteria



HIGH PRODUCT WASTAGE

Applying consensus definitions rigorously before stopping a transfusion protects both the patient and the supply



help is one click away.

Not sure whether you are seeing a true reaction, or what to do next? The **OneBlood Digital Hub** gives veterinary teams guided, algorithm-led tools to recognise, grade and manage transfusion reactions in real time, alongside a component selector, a rate & volume calculator and a one-minute haemovigilance reporting form. See the full overview at the end of this section.

FIRST RESPONSE — any suspected reaction

- Stop or slow the transfusion and keep the intravenous line open with an isotonic, non-calcium-containing fluid (e.g. 0.9% NaCl).
- Assess the patient: temperature, pulse, respiratory rate and effort, mucous membranes, blood pressure and, if available, SpO₂.
- Recheck unit identification, patient identity and expiry; visually inspect the unit for discolouration, clots or particulate matter.
- Check a patient plasma sample for haemolysis. If the plasma is haemolysed, do NOT restart the transfusion.
- Follow the sign-specific algorithm (fever / respiratory distress / tachycardia-hypotension / vomiting) and report the event to the blood bank.

CLASSIFICATION AT A GLANCE

	Immunologic	Non-immunologic
Acute (< 24 h)	FNHTR · Acute haemolytic (AHTR) · Allergic / anaphylactic · TRALI	TACO · TAD · Non-immune haemolysis · Citrate toxicity (hypocalcaemia) · Hypotensive (HYTR) · Hyperammonaemia · Septic / bacterial (TTI)
Delayed (> 24 h)	Delayed haemolytic (DHTR) · Delayed serologic (DSTR) · Post-transfusion purpura (PTP)	Transfusion-transmitted infection (delayed, e.g. Mycoplasma, Leishmania)

1 • FEBRILE REACTIONS

Febrile non-haemolytic transfusion reaction (FNHTR)

Acute · immunologic

Description	Acute fever >39 °C AND a rise >1 °C above the pre-transfusion baseline, occurring during or within 4 h of the end of transfusion. Non-haemolytic and not life-threatening, but causes patient discomfort. It is a diagnosis of exclusion .
Cause	Recipient antibodies against donor white-cell or platelet antigens , and/or transfer of pro-inflammatory cytokines that accumulate in stored cellular products. More common with RBC-containing products and with older units.
Prevalence	Common (1/10–1/100) The most common reaction in both species with RBC products. Dogs (pRBC) 3.9% ; cats (RBC) 5.7% — the single most frequent feline reaction. Lower with plasma (dogs 0.9%, cats 1.1%). Risk rises with RBC age >28 days and with infusion-pump delivery.
Diagnosis	Confirm the temperature criteria, then exclude external warming, patient infection, AHTR, TRALI, TACO and septic (TTI) reactions . Recheck unit ID/expiry, inspect the unit and check plasma for haemolysis.
Treatment	Usually self-limiting — antipyretics are not routinely required. Stop/slow the transfusion and reassess; if the patient is otherwise stable it may be restarted at the same or a slower rate. Never give acetaminophen (paracetamol) to cats — it is hepatotoxic and causes methaemoglobinemia.

2 • ALLERGIC REACTIONS

Allergic & anaphylactic transfusion reaction

Acute · immunologic

Description	Acute type I hypersensitivity , from mild and self-limiting (urticaria, pruritus, erythema, facial/genital angioedema) to anaphylaxis . Dogs may show gastrointestinal signs, hypotension or haemoabdomen; cats typically show respiratory signs. Most cases are mild and respond well to treatment.
Cause	IgE-mediated mast-cell and basophil degranulation (histamine, leukotrienes) in response to an antigen in the product — most often a plasma protein.
Prevalence	Common (1/10–1/100) The most common reaction with plasma in dogs (3.2%); dogs (pRBC) 2.2%; cats (RBC) 0.8%. More frequent with plasma-rich products and in dogs.
Diagnosis	Clinical: cutaneous signs (urticaria, angioedema, pruritus) ± gastrointestinal/respiratory signs, occurring <1 h to 4 h from the start, with rapid response to stopping the transfusion and supportive care. Rule out AHTR, TRALI and bacterial contamination, which can mimic anaphylaxis (hypotension, tachycardia).
Treatment	Mild / non-anaphylactic: administer an antihistamine ; if there is no progression, the transfusion may be restarted at a slower rate. Anaphylaxis: give epinephrine (adrenaline) immediately — up to 0.1–0.2 mg/kg IM, followed by a constant-rate infusion of 0.05–0.1 µg/kg/min IV — and do NOT restart. Prioritise epinephrine and supportive care over antihistamines. Routine corticosteroids are not recommended for treating allergic/anaphylactic transfusion reactions.

3 • HAEMOLYTIC REACTIONS

Acute haemolytic transfusion reaction (AHTR)

Acute · immunologic or non-immunologic

Description	Acute haemolysis of transfused (or recipient) red cells within 24 h. Signs: fever, tachycardia, hypotension, haemoglobinaemia / haemoglobinuria , icterus, hyperbilirubinaemia/-uria and an inadequate or falling PCV .
Cause	Immunologic: blood-type incompatibility — classically type-A blood given to a type-B cat , or a previously sensitised DEA-1 dog. Non-immunologic: thermal (over-warming/freezing), osmotic (hypotonic fluids) or mechanical damage to red cells, or bacterial contamination.
Prevalence	Common (1/10–1/100) Dogs (pRBC) 2.3%; cats (RBC) 0.6% . Naturally occurring alloantibodies are rare in dogs but strong in type-B cats (anti-A). Immunologic AHTR risk is markedly higher with pRBC stored >28 days .
Diagnosis	New-onset haemolysis within 24 h: haemoglobinaemia/-uria, spherocytosis, hyperbilirubinaemia and an inadequate PCV rise, ± fever, tachycardia, hypotension. Recheck unit identification and blood typing/crossmatch; perform a direct antiglobulin (Coombs) test. If the plasma is haemolysed, do NOT restart.
Treatment	Stop the transfusion immediately and do not restart. Provide supportive care: intravenous fluids to maintain perfusion, blood pressure and renal output; monitor for bilirubinuria and DIC. Assess the unit for haemolysis and microbial contamination, and investigate any typing/crossmatch error.

Delayed haemolytic (DHTR) & delayed serologic (DSTR) reactions

Delayed · immunologic

Description	DHTR: delayed haemolysis 24 h–28 days after transfusion — often mild, with an unexplained fall in PCV/Hb not due to bleeding, ± icterus, fever or lethargy. DSTR: a new alloantibody forms against a transfused antigen without detectable haemolysis (a “silent” reaction).
--------------------	--

Cause	An anamnestic (secondary) antibody response to donor red-cell antigens from previous sensitisation, or naturally occurring low-titre alloantibodies. In cats, DHTR follows AB-mismatched or canine (xeno-) transfusion.
Prevalence	Uncommon (1/100–1/1000) DHTR: true incidence unknown and probably underestimated (often asymptomatic). DSTR: no published reports in dogs or cats; antibody screening is not yet available in veterinary practice.
Diagnosis	DHTR: unexplained decrease in PCV/Hb between 24 h and 28 days, with indicators of red-cell destruction and/or a newly identified alloantibody (positive DAT). DSTR: demonstration of new alloantibody/seroconversion 24 h–28 days after transfusion, without haemolysis.
Treatment	DHTR: usually self-limiting — supportive care and monitoring of PCV; manage as for AHTR if clinically significant. DSTR: no treatment needed. For both, the key action is to record the finding and crossmatch (and avoid the offending antigen in) future transfusions .

4 • RESPIRATORY REACTIONS

Transfusion-associated circulatory overload (TACO)

Acute · non-immunologic

Description	Acute circulatory overload producing hydrostatic pulmonary oedema within 6 h . Signs: new or worsening respiratory signs, cough, dyspnoea, orthopnoea, pulmonary crackles and hypertension, with a positive response to diuretics .
Cause	High infused volume and/or rate , especially when cardiac, renal or pulmonary disease or chronic anaemia predispose to fluid intolerance.
Prevalence	Uncommon (1/100–1/1000) Uncommon in recent prospective data: dogs (pRBC) 0.2% ; cats 0.8% . Listed as a common band for RBC-containing products in this guide because risk is dose- and rate-dependent and increases in predisposed patients.
Diagnosis	Respiratory distress within 6 h plus evidence of volume overload: bilateral pulmonary infiltrates or pleural effusion on imaging; left-atrial enlargement/cardiomegaly on echocardiography; markedly raised NT-proBNP (post/pre ratio >1.5) ; positive diuretic response. Distinguish from TRALI.
Treatment	Stop or slow the transfusion; provide oxygen and judicious furosemide (1–2 mg/kg IV) ; monitor blood pressure, respiratory rate and effort. Keep any further product administration conservative and controlled.

Transfusion-related acute lung injury (TRALI)

Acute · immunologic

Description	Acute immunologic lung injury within 6 h : hypoxaemia, respiratory distress and non-cardiogenic pulmonary oedema, with no left-atrial hypertension and no pre-existing lung injury.
Cause	Donor plasma anti-leukocyte antibodies (anti-HLA/HNA) bind recipient neutrophils and pulmonary endothelium, causing alveolar damage (a “two-hit” mechanism). Highest risk with plasma-rich products.
Prevalence	Uncommon (1/100–1/1000) Considered rare ; reported in 3.7% in one small canine study, with no published feline reports.
Diagnosis	Acute hypoxaemia (P/F $\leq$ 300 or SpO ₂ $<$ 90% on room air) with bilateral pulmonary oedema on imaging within 6 h; no left-atrial hypertension; no alternative ARDS risk factor. Echocardiography and NT-proBNP are typically normal (unlike TACO).
Treatment	Supportive care: oxygen, intravenous fluids and vasopressor support as needed; lung-protective ventilation with low tidal volumes if mechanical ventilation is required. Avoid furosemide once TRALI is diagnosed (no benefit, potential harm); glucocorticoids are not supported.

Transfusion-associated dyspnoea (TAD)

Acute · non-immunologic

Description	Acute respiratory distress within 24 h that does not meet the criteria for TACO, TRALI, an allergic reaction or underlying pulmonary disease — a diagnosis of exclusion .
Cause	Not defined; a category for respiratory reactions that cannot be classified as TACO or TRALI.
Prevalence	Uncommon (1/100–1/1000) Reported low: dogs (pRBC) 0.2% ; occasional feline reports.
Diagnosis	Exclusion: rule out TACO, TRALI, allergic reaction and underlying pulmonary disease.
Treatment	Stop the transfusion; provide oxygen and supportive care ; manage per the respiratory algorithm and reassess.

5 · SEPTIC & INFECTIOUS REACTIONS

Transfusion-transmitted infection (TTI) / bacterial contamination

Acute or delayed non-immunologic

Description	Acute: septicæmia from a bacterially contaminated unit — fever, tachycardia, hypotension, vomiting during or after transfusion. Delayed : transmission of a vector-borne agent (e.g. <i>Mycoplasma</i> , <i>Leishmania</i>).
Cause	Contamination introduced during collection, processing or storage, or an infectious agent carried by the donor .
Prevalence	Uncommon (1/100–1/1000) Uncommon and rare where rigorous donor screening (PCR/serology) and closed-system processing are used — as in every OneBlood unit.
Diagnosis	Acute septic reaction: assess the unit for haemolysis, discolouration and cytological evidence of contamination; take aerobic and anaerobic blood cultures of both the patient and the unit (gold standard), and use PCR to confirm the organism. Delayed: screen for vector-borne agents.
Treatment	Stop the transfusion and do not restart . Provide supportive care; start broad-spectrum antimicrobials as samples are collected; save and culture the unit and report the event to the blood bank.

6 · METABOLIC & OTHER REACTIONS

Citrate toxicity (ionised hypocalcaemia)

Acute · non-immunologic

Description	Ionised hypocalcaemia after large-volume or rapid transfusion, as citrate anticoagulant chelates calcium. Signs: tremors, muscle fasciculations, facial rubbing, ptyalism, vomiting/nausea, hypotension, arrhythmia and, in severe cases, seizures.
Cause	Citrate load exceeding hepatic metabolism during massive transfusion; risk is higher with hepatic dysfunction and in neonates.
Prevalence	Uncommon (1/100–1/1000) Essentially confined to massive transfusion (> 1 blood volume/24 h, or > ½ blood volume/3 h).
Diagnosis	Ionised calcium ≤ 0.9 mmol/L with compatible clinical signs during or after massive transfusion.
Treatment	Supplement calcium (gluconate or chloride) when ionised calcium is ≤ 0.9 mmol/L, or empirically during massive transfusion — given slowly IV over 20–30 min or by CRI. Do not give calcium through the same line as the citrated product . Slowing or pausing the transfusion helps.

Hyperammonaemia · Hypotensive (HYTR) · Post-transfusion purpura (PTP) Acute or delayed uncommon–rare

Description	Hyperammonaemia: raised ammonia from stored (older) units, clinically relevant mainly in patients with hepatic dysfunction (encephalopathy). HYTR: acute, isolated hypotension during/shortly after transfusion that resolves on stopping. PTP: rare, delayed severe thrombocytopenia with bleeding/purpura days after transfusion.
Cause	Hyperammonaemia — ammonia accumulation in storage with impaired hepatic clearance. HYTR — bradykinin-mediated (associated with ACE inhibitors in people). PTP — platelet alloantibodies.
Prevalence	All very rare (<1/10000) HYTR was reported at 0.2% (dogs, plasma) in one prospective study. PTP has a single canine case report.
Diagnosis	Hyperammonaemia — raised blood ammonia / worsening encephalopathy after stored blood in a hepatic patient. HYTR — acute hypotension within 1 h with other causes (anaphylaxis, AHTR, sepsis, TACO/TRALI, haemorrhage) excluded. PTP — severe thrombocytopenia days later with platelet-binding antibodies.
Treatment	Hyperammonaemia — supportive care and use of fresher units in at-risk hepatic patients. HYTR — stop the transfusion, supportive care, do not restart unless necessary. PTP — corticosteroids or IVIG, with supportive care.

REPORTING & HAEMOVIGILANCE

Every suspected reaction — whether or not it ultimately meets TRACS criteria — is worth reporting. **Haemovigilance is how transfusion medicine improves:** it refines definitions, exposes product- and process-related risks, and makes every future unit safer.

- **Record** the reaction type, its timing, the clinical signs, the component and unit number, and the patient outcome.
- **Report to OneBlood** through the Digital Hub “Report a reaction” form, or contact **ONEBLOOD**.
- **Retain a sample** of the unit and a post-transfusion patient sample when a reaction is suspected, to support investigation (haemolysis, culture, crossmatch).
- **Apply the TRACS criteria before discarding a unit** — confirming whether a true reaction has occurred protects the patient and prevents unnecessary product wastage.

Key references

- Davidow EB et al. AVHTM TRACS **Part 1: Definitions and clinical signs**. J Vet Emerg Crit Care 2021;31(2):141–166.
- Davidow EB et al. AVHTM TRACS **Part 2: Prevention and monitoring**. J Vet Emerg Crit Care 2021;31(2):167–188.
- Odunayo A et al. AVHTM TRACS **Part 3: Diagnosis and treatment**. J Vet Emerg Crit Care 2021;31(2):189–203.
- Hall GBF et al. Incidence and risk factors for acute transfusion reactions in **dogs**. J Vet Intern Med 2024;38(5):2495–2506.
- Hall GBF et al. Incidence and risk factors for acute transfusion reactions in **cats**. J Vet Intern Med 2025;39(6):e70246.
- Santo-Domingo NE & Lewis DH. Indications and complications of canine plasma products in 170 patients. J Vet Emerg Crit Care 2021;31(2):263–268.

Decisions made simpler.

A **digital hub** that helps you choose the right component, set safe rates and volumes, and recognise and manage transfusion reactions — so the right call is always within reach, day or night.

Built for busy veterinary teams and aligned with ISFM, AVHTM and ACVIM guidance.

Fewer wasted units.

Faster, safer decisions.

Because 46% of suspected reactions turn out not to be reactions at all, quick access to the right criteria protects your patient and a scarce, lifesaving resource. The Hub puts that clarity one click away.

Guidelines we follow

Protocols aligned with the latest **ISFM**, **AVHTM** and **ACVIM** transfusion guidance.





⇒ SCAN HERE



⇒ Access the Hub at
oneblood.vet
24/7

⇒ vet line
0800 ONE BLOOD

give, trust, care.

Which component?

A guided tool that takes you from the clinical picture to the right blood product.

Rate & volume calculator

Work out safe transfusion rates and volumes for each individual patient.

Reaction management

Recognise, grade and manage transfusion reactions quickly, with algorithm-led steps.

Report a reaction

Submit haemovigilance feedback in minutes — it makes every future unit safer.

Funding Partners

RUI FERREIRA
JENNY WALTON
MARIA CRADDOCK

Great things are never built alone. What holds this project together is a rare mix of mission, passion, energy, initiative and genuine commitment, alongside a soul rooted in trust, technical excellence, welfare and love. We are profoundly grateful for the extraordinary people who believed in this vision, brought their talents together and turned it into a living, lifesaving reality.

Founding Partners



RUI FERREIRA

DVM, MRCVS, PhD
Director, Cofounder

Graduated in Veterinary Medicine from the Institute of Biomedical Sciences Abel Salazar - University of Porto (ICBAS-UP) in 2005. PhD in Veterinary Medicine at ICBAS-UP in 2014.

Externship at the Animal Medical Centre in Manchester in 2003. In 2005, did several externships at the reference clinic Veterinaria, at the Clinical Hospital of the Faculty of Veterinary Medicine of the Autonomous University of Barcelona, at the Matosinhos Veterinary Clinic and at the Oporto Veterinary Hospital. In 2006, he completed a traineeship at the Bacteriology Department of the National Veterinary Laboratory.

Worked as a DVM at the Oporto Veterinary Hospital from 2005 to 2008, focusing on emergency and intensive care, physiotherapy and haemotherapy. Doctorate in Veterinary Medicine in 2008-2013, entitled "Transfusion medicine in dogs - from the donor's health to the efficacy in the recipient", at the Institute of Biomedical Sciences Abel Salazar - Porto University.

Participated as a speaker in several Transfusion Medicine related lectures and national congresses. Author of several scientific articles published in national and international journals focusing on canine blood collection and processing and haemotherapy.

Founder, Chief Executive Officer and Clinical Director of the BSA - Animal Blood Bank from 2011 until 2024. Guest Assistant Professor at the Pharmacology Department of the Institute of Biomedical Sciences Abel Salazar - University of Porto (ICBAS-UP) since 2024. Partner and Chief Executive Officer of Regenera Sciences since 2024. Cofounder and Director of OneBlood UK since 2026.



JENNY WALTON

MSc (R), BVM&S, MRCVS
Director, Cofounder

Graduated in Veterinary Medicine from the Royal (Dick) School of Veterinary Studies in 1998. Worked as a mixed practice vet for 4 years before moving into the field of emergency and critical care in 2002. Worked for Vets Now Emergency for sixteen years. While sitting on the Vets Now clinical board headed a project to supply Vets Now clinics with blood products.

Through that project ran the practical trials for the launch of Pet Blood Bank UK and resided as the veterinary supervisor for the charity for thirteen years. In 2018 commenced a Master's degree in veterinary research, involving a multi centre clinical trial investigating the use of a lyophilised platelet product in actively bleeding thrombocytopenic dogs. Worked in a high volume community first opinion practice from 2015, and set up and managed an in house blood donation programme including regular feline donations.

Participated as a speaker in several Transfusion Medicine related lectures. Author of numerous abstracts and scientific articles published in peer reviewed national and international journals on blood banking and transfusion medicine.

Founder and sole director of veterinary apheresis service UK, and veterinary director of Innovative Animal Supplies - a veterinary specific transfusion consumables company since 2021. Cofounder and Director of OneBlood UK since 2026.



MARIA CRADDOCK

RVN
Operations Lead

Maria began her career in 2016 at Durham Vets4Pets, where she spent a year assisting veterinary nurses and gaining hands-on experience in clinical care. She then progressed into a nursing care assistant role, building a strong foundation in patient support and everyday veterinary practice.

Driven by her commitment to animal welfare and professional growth, Maria went on to complete her veterinary nurse qualification, becoming a Registered Veterinary Nurse (RVN) in 2021.

Working closely with Jenny Walton has been a defining part of her journey, opening the door to an exciting new opportunity: helping to build a business alongside Jenny and Rui.

OneBlood UK Operations Lead 2026.



Bibliography

