V-PET™ Veterinary Platelet Enhancement Therapy

WHAT IS V-PET™

V-PET™ is a new regenerative medicine system, available to veterinarians nationwide through VetStem Biopharma.

This new system provides a convenient means to concentrate platelets and their associated growth factors from an animal’s own blood (10ml to 55ml) for use as platelet enhancement therapy.

- Single use all-inclusive kit
- Closed sterile system (can be used in the surgery suite)
- Gentle 3X-7X* platelet concentration (gravity filtration based)
- No centrifuge required (no capital equipment, “portable” system)

Supported by veterinary peer reviewed publications (see references)

Using V-PET™ a veterinarian can have an injectable platelet concentrate rich in biologically active cytokines and growth factors ready in about 30 minutes (from blood collection to in-situ injections).

Blood Collection (10ml – 55ml)
Preparation
Filtration (15min)
Recovery
Ready for injections

As blood flows through the V-PET system, platelets are selectively captured on the surface of the filter media through complex interaction of size exclusion and adsorption, while the majority of red cells pass through. The platelet concentrate is then recovered by back-flushing the filter with a harvest solution.

* 3X concentration for standard 40lbs dog, up to 7X concentration for standard horse.
** Platelet Enhancement Therapy is not appropriate for intravenous use – intra-articular or intra-lesion use only.
HOW DOES PLATELET ENHANCEMENT THERAPY WORK?

Platelets activate by exposure to damaged tissue, releasing their granular contents which include anabolic growth factors such as platelet-derived growth factors (PDGF), transforming growth factors-β (TGF-β), and vascular endothelial growth factor (VEGF). These growth factors help attract progenitor cells to the injury site and play a key role in stimulating tissue repair through fibroblast expansion and cellular matrix production.

Since the animal is the donor and recipient, the safety profile for such autologous platelet therapy is highly favorable.

With platelet enhancement therapy a solution concentrated in platelets is injected directly into an injured tissue area, with the objective to ‘kick-start or further stimulate’ the patient’s internal healing processes.

References (specifically selected because they utilize V-PET™ technology as platelet enhancement system)


V-PET™ platelet enhancement therapy system is manufactured for use by VetStem Biopharma in the US and Canada, through a distribution and clinical research agreement with Pall Life Sciences. V-PET™ is a trademark of Pall Corp. Product photography courtesy of Pall Corp.