



E-PET Equine Platelet Enhancement Therapy

Description

A simpler, easier way to prepare a platelet therapy. No centrifuge, no additional equipment, just 15 minutes from blood draw to delivery.

- Non-surgical
- Non-pharmaceutical
- Outpatient procedure
- No additional equipment or outside lab processing required
- Can be done in the office, in the field, or even in a client's home
- Gentle gravity filtration is easy on platelets, creating a high quality platelet therapy rich in growth factors
- Once the blood is drawn, preparing the platelet therapy takes approximately 15 minutes. Including the blood draw and injection, a single treatment typically takes 30 minutes.
- Autologous preparation reduces the risk of immune mediated reactions

Applications

- For the treatment of tendon and ligament damage, and osteoarthritis

Performance

- Requires 55ml blood draw
- Produces 6-8ml of platelet therapy
- 7x concentration of platelets and platelet associated growth factors
- 4x concentration of white blood cells (WBC)

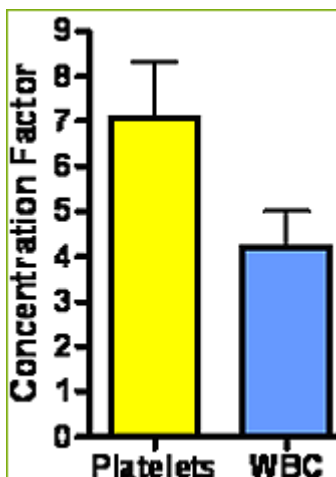
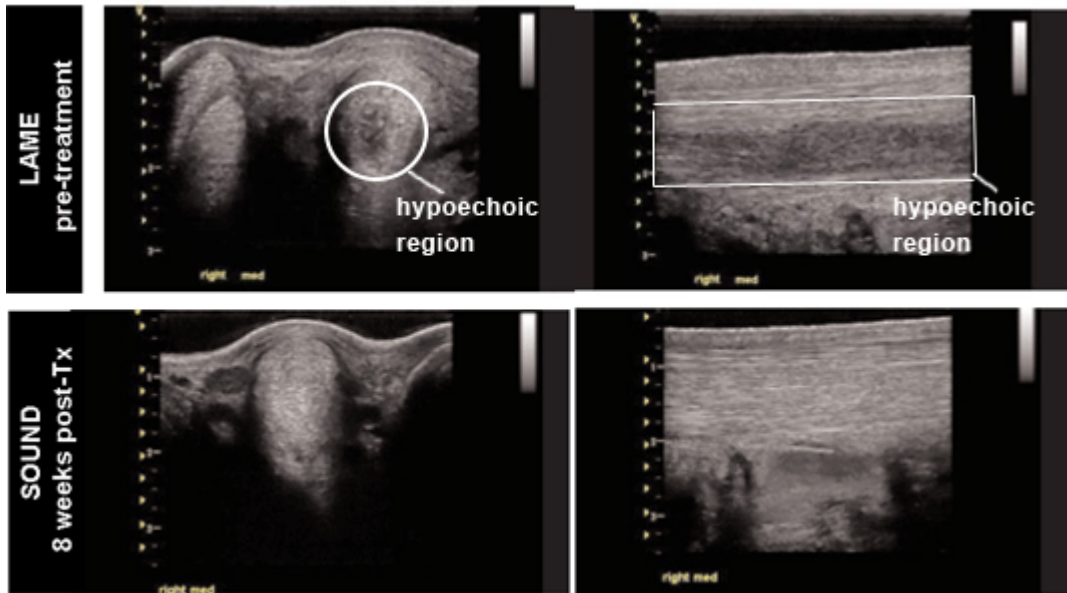


Figure: Platelet and WBC concentration factors post E-PET processing (n = 11 horses \pm standard deviation)

- A study of E-PET was reported on by Roger Smith, DVM of the Royal College of Veterinary Medicine, at the Dec 6, 2008 American Association of Equine Practitioners annual meeting in San Diego, CA. Dr. Smith conveyed the results of a trial of 14 cases of suspensory ligament desmitis with lesions affecting an average 28% of their total cross-sectional areas as determined by ultrasonography. The average time for lameness score to reduce to 0/10 (not lame) was 5 weeks. Ultrasonographic mean score on presentation was 2.9 (range 2.5 -3) and the average score at the three month evaluation was 1.25.
- A case report of E-PET platelet therapy for suspensory ligament repair showed the treatment to be safe, and apparently efficacious in effecting improvement at 8 weeks post-treatment . Improvement in this animal, who failed to respond to standard therapy, was judged by comparing the size of the hypochoic region measured with ultrasound before and after platelet therapy.

E-PET Case Study, Medial Branch of Suspensory Ligament



Additional Information

This product is used to create a platelet therapy from autologous equine blood.

E-PET application is as easy as 1, 2, 3





Equipment Provided

E-PET System comprising:

- 1 - E-PET set
- 1 - Anticoagulant Solution (ACD-A)
- 1 - Capture Solution (sterile water for injection)
- 1 - Harvest Solution
- 3 - 10 mL Luer lock syringes
- 1 - 60 mL Luer lock syringe
- 1 - Clean drape

Equipment Required

- 1 - Needle for aspiration of blood
- 3 - Needles for aspiration of anticoagulant, capture, and harvest solutions
- Equipment for clipping and surgical preparation of aspiration site
- Equipment for implantation/application

How to Recover Concentrated Platelets

Preparation

1. Place clean drape on a flat surface.
2. Remove E-PET set from box and lay it on the drape. (If Harvest Solution is very cold put bottle into pocket before use.)
3. **NOTE:** Push the top and bottom clamps into the closed position.
4. Preload the 60 mL syringe with 5 mL anticoagulant solution.
5. Withdraw 9 mL of capture solution into one of the 10 mL syringes and then transfer the capture solution into the top bag via Port A.
6. Remove the syringe and replace the cap on Port A.
7. Hang the E-PET set so that the bag containing the capture solution is above the filter, the arrows on the filter point downward, and the bags hang freely. Check that both top and bottom clamps are closed.

Blood Collection

1. Collect 55 mL whole venous blood into the preloaded 60 mL syringe, giving a total volume of 60 mL.
2. Attach the syringe to Port A and transfer the anticoagulated whole blood to the top bag while gently mixing it with the capture solution by rocking the bag.
3. Remove the syringe and replace the cap on Port A.
4. Continue mixing the blood and capture solution by removing the E-PET set from its hanging position and inverting the bag set at least 10 times.
5. Good results require that the sample and capture solution are well mixed.

Filtration

1. Once the blood sample and Capture Solution are mixed well, re-hang the E-PET Set in a vertical position with the top bag above the filter, the arrows on the filter pointing downward, and the bag hanging freely.
2. Open the bottom clamp and then the top clamp to allow the whole blood to flow through the filter into the lower bag. Filtration should take between 5 and 14 minutes. (Cold environmental temperatures may cause slower flow rates.)
3. Once the filtration is complete (when the unprinted side of the filter is free of fluid and flow has stopped) push the **bottom** and **top clamps** into the **closed** position.

Recovery of Platelets

1. Withdraw 8 mL Harvest Solution into one of the 10 mL syringes.
2. Attach this syringe to Port C. The platelets concentrate will be collected in the remaining empty 10 mL syringe. This syringe should be handled in a sterile fashion if full sterility is required for the application/implantation procedure.
3. Remove any residual air from the remaining empty 10 mL syringe by depressing the plunger.
4. Attach this empty syringe to Port B.
5. Holding the filter with one hand, rapidly inject the Harvest Solution through the filter with constant pressure. This will take approximately 2-4 seconds.
6. If the plunger does not depress easily, remove syringe(s) and then reattach.
7. The platelets will be back-flushed into the empty 10 mL syringe attached to Port B.
8. Remove the syringe containing the platelet concentrate from Port B.
9. The platelet therapy is now ready for use and should be applied/implanted within 60 minutes of recovery.

Additional training and consultation available at Pall by calling, 516-801-9727 or emailing Jeffrey_Schaffer@pall.com

Always dispose of blood-contaminated products and 'sharps' in a manner consistent with established biohazard safety procedures.

Ordering Information

VetCell Americas

Distributor of E-PET in the USA
Telephone: 1 800-752-8538
Email: info@vetcellamericas.com
Fax: 1 678-807-1355
Administrative Offices:
VetCell Bioscience, Inc.
176 Nix Point Road
Dawsonville, GA 30534

EquStem

Distributor of E-PET in the USA
Telephone: 1 888-EQUESTEM (378-7836)
Email: info@EquStem.com
Home Office:
65 Commerce Way,
Hackensack, NJ 07601

VetCell

Distributor of E-PET in Europe, Middle East, and Asia
Telephone: +44 (0) 1865 - 922227
Email: info@vetcell.com
Home office:
Unit 18 Tannery Yard
Burford OX18 4DQ, United Kingdom

V-Care

Distributor of E-PET in **Europe** and **Asia**
Telephone: +49 (0) 341 - 46367920
Email: info@v-care-biomedical.com
Home office:
Deutscher Platz 5b
D-04103 Leipzig, Germany

Contact Information

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This information is accurate as of the revision date indicated.