StemPhase Biomedical Ltd.

StemPhase™

(Animal Derived Cellular Fluid Product)

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StemPhase™ Product Overview

The StemPhase ™ program consists of easy to administer, under the skin, stem cell fluid injections along with oral supplements to restore soundness in your horse.

The StemPhase ™ program has been proven to be successfull in many structural problems involving bone and soft tissue injuries and / or diseases including:

- All forms of Arthritis
- Joint Deterioration and Skeletal Disorders
- All forms of Soft Connective Tissue Injuries
- Lumbar Spine Problems and Ligament Injuries
- Tendon, Suspensory and Ligament Injuries
- Navicular, Ring and Side Bone Disease
- Post Operative

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StemPhase™ Product Characterization

Treatment Indications:

- The treatment of equine acute orthopedic and soft tissue injuries, including injury to the joints and associated lameness.

- The treatment of canine acute orthopedic and soft tissue injuries, including injury to the joints and associated lameness.

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StemPhase™ Product Characterization

Product Composition:

- Granuloma fluid secreted by equine stem cells, comprised of various paracrine growth factors, healing proteins, and suspected immune-suppressive factors.

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StemPhase™ Product Characterization

Observed Benefits:

- The StemPhase™ program represents a lower cost alternative to traditional veterinary stem-cell-based therapies.
- Mitigates the risk of tumorigenicity potentially associated with stem-cell-based treatments.
- The survival rate of cellular fluid at the injury site is longer than that for actual stem cells.
- Prolonged exposure of injured tissue to cellular fluid supports stronger and faster recoveries.

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StemPhase™ Product Process

1. The granuloma fluid manufactured for StemPhase™ is purified via centrifuge to remove all excess solid materials including any free-floating undifferentiated stem cells.

2. The purified fluid is then freeze-dried for storage in powder-form until ordered by a patient animal's veterinarian.

3. Fluid can be substituted for stem cells in many of their applications.

4. All product is collected by the research team and processed a medical lab for StemPhase ™ use.

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StemPhase™ Harvested Fluid after Aspiration

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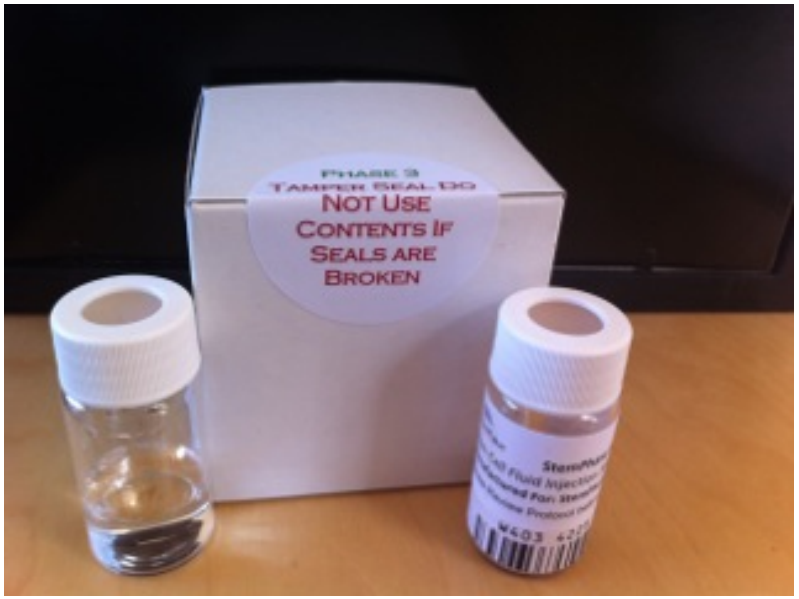
StemPhase™ Freeze Dried Product in Finished Form



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StemPhase™ Mechanism Of Action

- The product manufactured for StemPhase™ contains high-levels of paracrine growth factors (VEGF, CTGF, etc.) which are similar to those factors present in platelet rich plasma (PRP).

- Mass spectrometric analysis shows that the StemPhase™ product contains various therapeutic proteins (gelsolin, cronin, hemopexin, fibronectin short chain and α-fibrinogen, among others) known to support the animal's own wound healing process.

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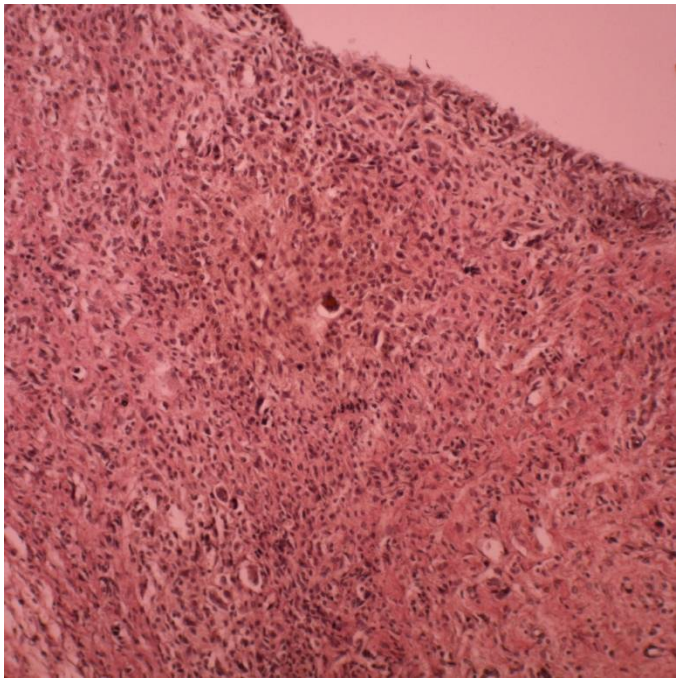
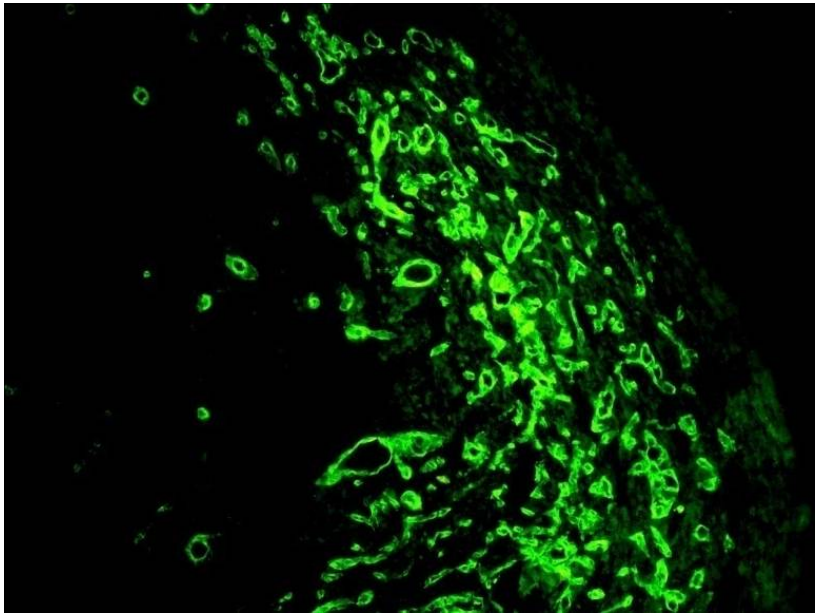
Images Of Cellular Growth Surrounding the Implanted Device





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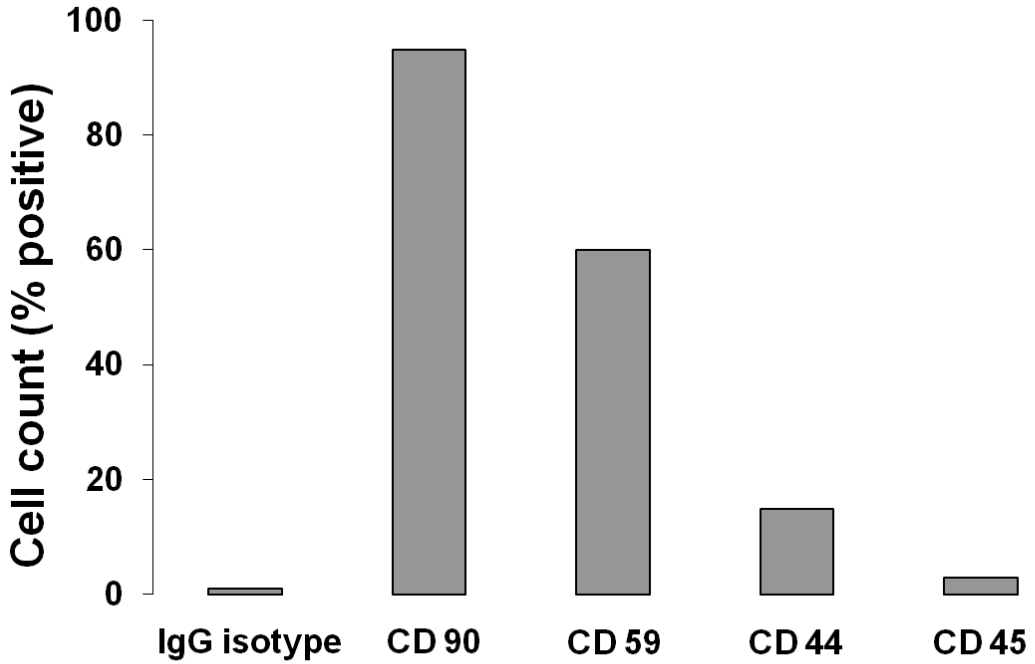
Mesenchymal Stem Cell Markers Existing in the Trapped Fluid and Surrounding Tissue



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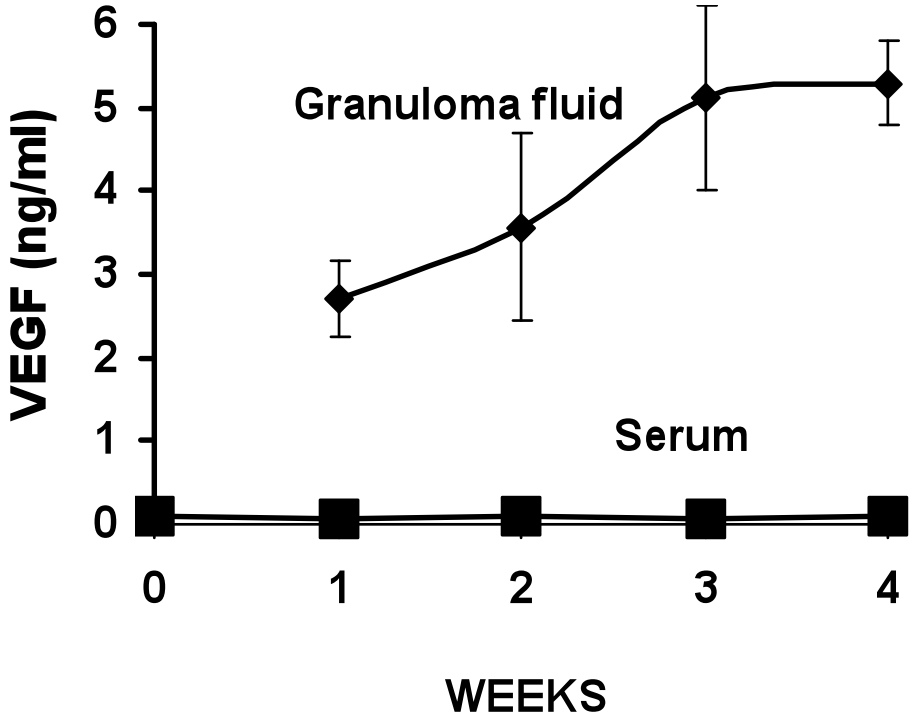
Growth Factors of Product Manufactured for StemPhase™ vs Animal's Own Serum



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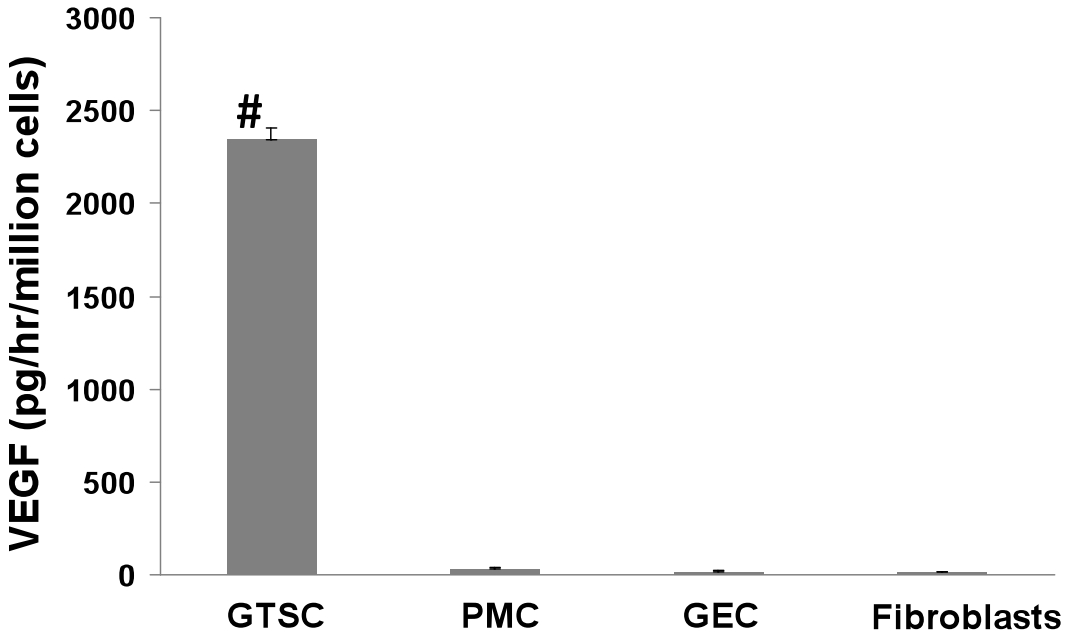
Vascular Endothelial Growth Factor (VEGF) Production



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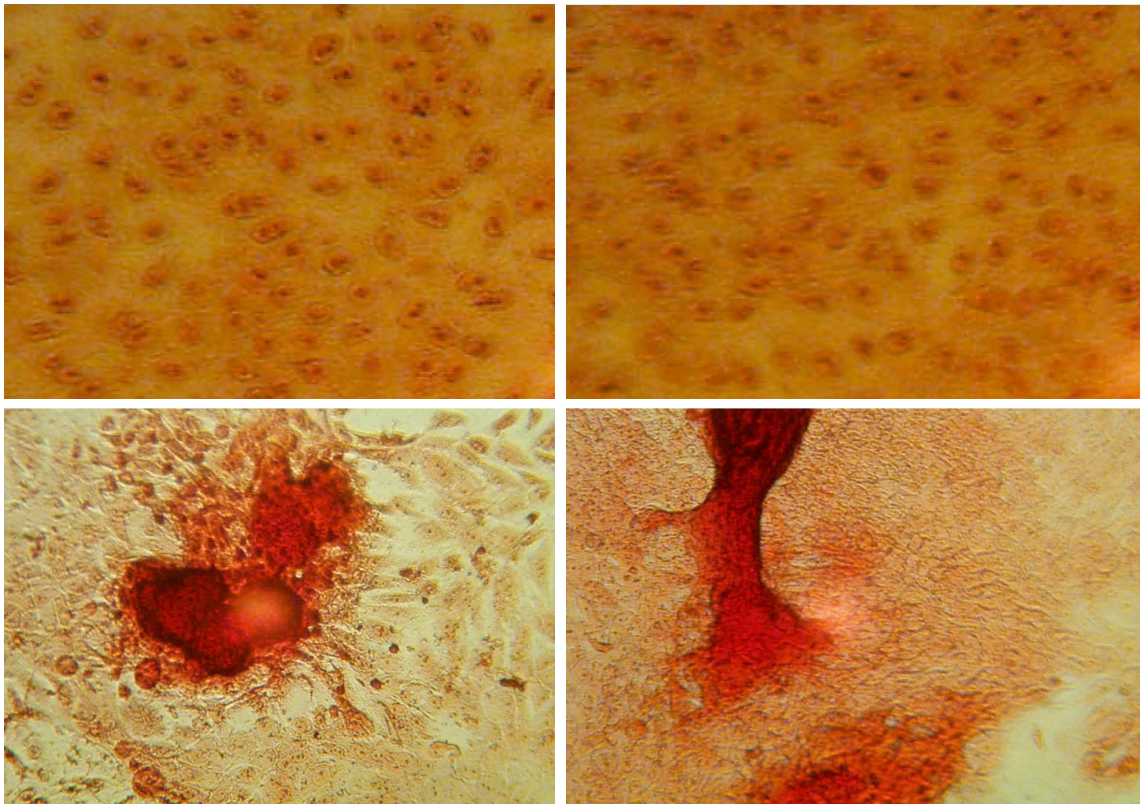
Growth of Mammalian Cells - StemPhase™ Fluid vs. FBS



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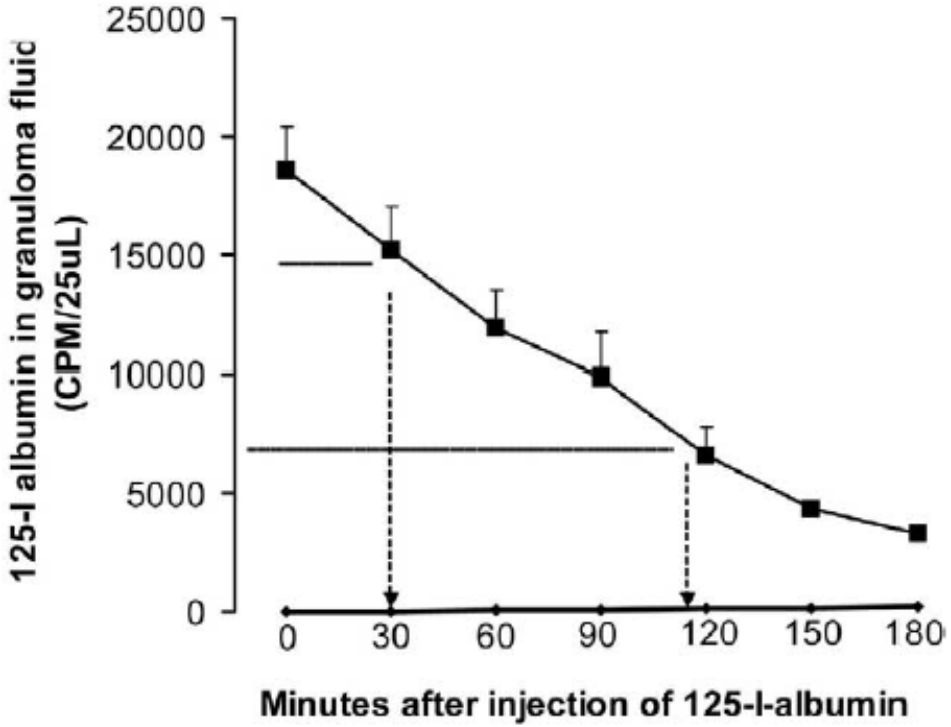
Fluid Collection Timing



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Selected Treatment Observations

Efficacy:

- Long-term effects; significant improvement observed in the treatment of chronic indications in equine.

- In cases of residual ataxia as a result of EPM in horses, multiple improvements of neurological deficits.

- In cases of ACL tears in canines, 80-85% of treated animals show beneficial results.

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Selected Treatment Observations

Safety:

- Equine: other than a few instances of local swelling and discomfort around the injection area in short term, no adverse effects observed.

- Canine: limited incidence (5%) of delayed hyper-sensitivity resulting in facial edema, utecaria, and pruritis.

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Questions ….

Thank You….