

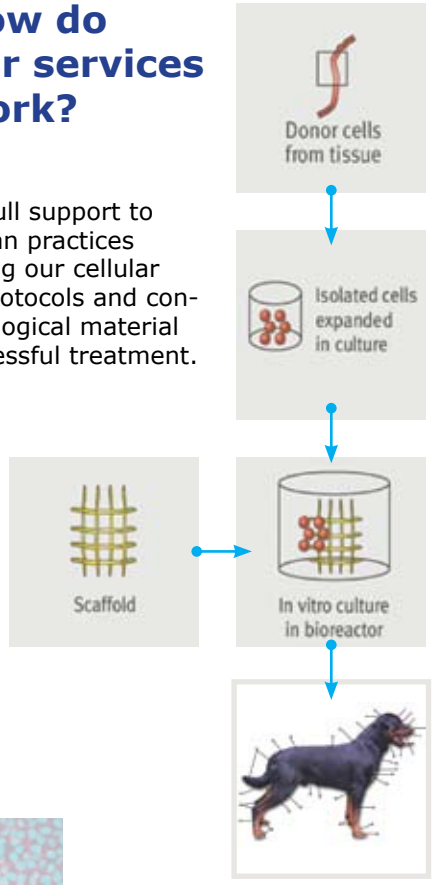
Research and Future Products of Fat-Stem

Together with various universities in Europe, Fat-Stem is working on the reconstruction of chronic, focal osteochondrial defects of joints in horses and other animals by using autologous stem cells and polymer based scaffolds.

Fat-Stem conducts **clinical veterinary research** on cellular therapies to improve the survival of implants and cell-based products as well as the healing mechanism behind it. Therefore, Fat-Stem works together with different clinics in Europe. Fat-Stem is driven by the increasing demand for innovative cellular veterinarian treatments, through publications and intellectual property rights.

How do our services work?

We offer full support to veterinarian practices in providing our cellular therapy protocols and controlled biological material for a successful treatment.



How to contact us?

Your veterinarian doctor can contact Fat-Stem to introduce cellular therapy in his practice:

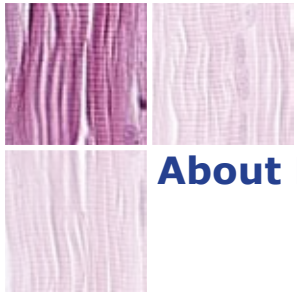
Please contact:
Fat-Stem Central Laboratories
Contact person: Dr. Guy Wouters
info@fat-stem.com

FAT STEM



The veterinary regenerative approach for horses and small animals

www.**fat**-stem.com

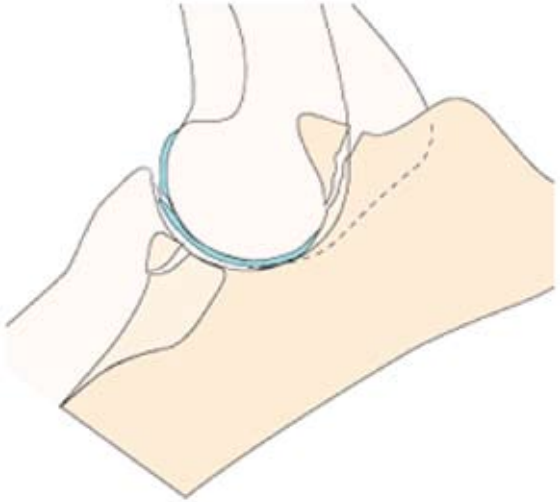


About Fat-Stem

Fat-Stem is a veterinarian service company offering cellular therapies to dogs, horses and other animals based on experience, research and new developments in the field of regenerative medicine.

The production of stem cells from different origins under GMP conditions guarantees a professional service towards different veterinarian hospitals and practices.

Fat-Stem is continuously looking for new opportunities in veterinarian cellular therapies like arthritis, chondrodysplasy and dog-diabetes.



Dog-Stem, a treatment for severe osteoarthritis in dogs

Osteoarthritis in dogs is one of the most common cause of chronic pain in more than 20 % of our dogs, characterized by a degeneration of the articular cartilage and loss of matrix and cartilage surface. Evidence suggesting that NSAIDs do not provide complete pain relief, stem cells provide an alternative therapy for many dogs.

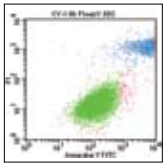
Dog-Stem which uses the animal's own fat to obtain adult stem cells is now available: the stem cells are injected into the damaged area to stimulate growth of healthy cells, encouraging regeneration. This safe minimally invasive effective treatment of arthritis dramatically improves the quality of life for the veterinary patient that suffers this painful disease and the potential complications associated with current conventional therapies. Stem cells therapies in osteoarthritis show an improved orthopedic score for lameness, pain reduction and joint stiffness (mobility). This long lasting effect due to the immunomodulatory actions of stem cells seems to work, possibly by secretion of cytokines which plays a significant role in joint diseases.

The multipotential differentiation capacity, especially the chondrogenic differentiation property of stem cells and their anti-inflammatory functions make them the ideal candidate cells for cell therapy to treat osteo and rheumatoid arthritis.

The service includes protocols for biopsies, logistic procedures, controlled cell mass production and clinical protocol.

The Dog-Stem service contains a three step procedure that can be performed in each veterinary practice. After a biopsy has been taken by the vet, he will inform Fat-Stem Laboratories and the kit will be picked up the same day for further processing.

Dog-Stem procedure



STEP 1:
Adipose tissue (30 grams) is collected aseptically via surgical lipectomy from the abdomen or from either an external thoracic fat pad caudal to the scapula after the dog was anesthetized. The biopsy is then placed into a labeled sterile tube available in a validated transport box specially fitted with gelpacks and shipped by overnight express courier to Fat Stem Laboratories for processing.

STEP 2:
Upon arrival at the laboratory, the stem cells are isolated, harvested and counted in a well controlled environment. Cells are prepared 'ready for administration' and can be stored for future use.

STEP 3:
The cells are returned for immediate-intra-articular injection in affected joints after about 3 weeks. In case of severe rheumatoid arthritis, an intravenous injection can be applied. Treated dogs' lameness, range of motion, and pain on manipulation, as well as their overall combined scores, significantly improved and improved relatively to placebo animals.