

# Rebuilding the Body with ActiStem Therapy!

It is true in both humans and pets that our bodies naturally change as we age. Some of that change can be in the form of tissue degeneration – a lifetime of use can wear on our bodies like tread wears off a tire. This wear and tear is usually most painful – and therefore most obvious – in the areas that experience the most movement: our joints.

A joint is the region where two bones come together in a way that allows some degree of movement. Joints that experience the most movement have layers of flexible cartilage between the two bones and strong ligaments that hold the bones within the joint. This cartilage cushions the bones and prevents them from rubbing against each other and the ligaments hold the bones in the correct alignment so they cannot shift. Damage to the ligaments or cartilage of a joint can cause pain and mobility issues, as bone is allowed to rub against bone.

Painkillers and anti-inflammatories can provide some temporary relief from the pain, but they do not treat the cause – which allows further damage to occur and eventually more and more powerful medications are required to manage the ever-increasing pain. The only way to treat the cause and restore function is to rebuild the lost tissue.



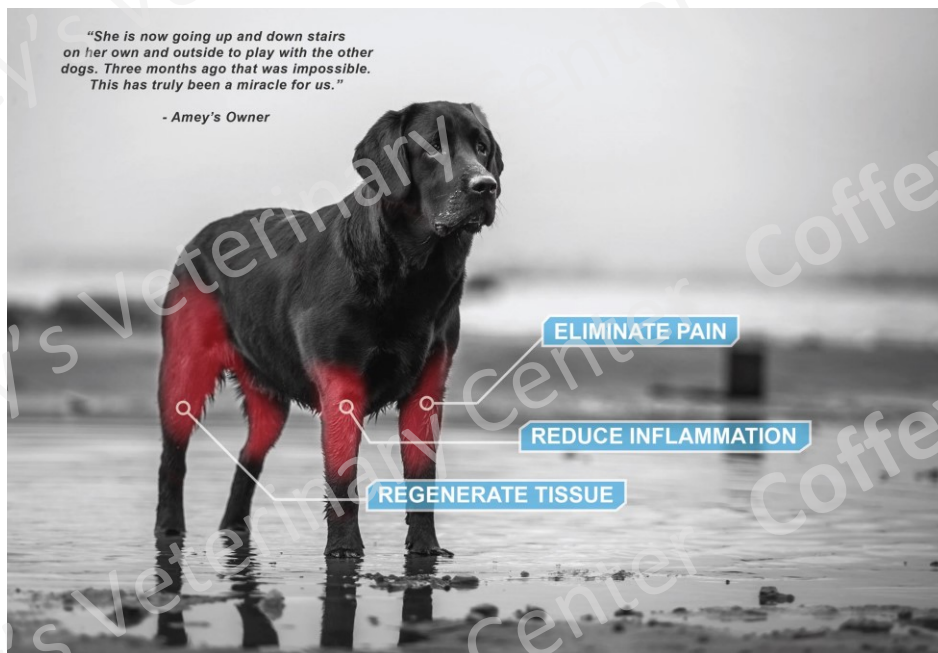
Until the late 1900's, conventional medical wisdom was that damaged cartilage could not be repaired. Once the cartilage in a joint was degraded, surgical placement of an artificial joint was the only recourse. Options for repairing damaged cartilage started with crude methods of removing or destroying damaged cartilage in an attempt to generate a blood clot and stimulate the bone marrow. Other options including cartilage transplants from deceased donors or from other joints in the same body became available later on. More sophisticated techniques involving surgical micro-damage to the degenerating cartilage (encouraging the body to self-heal) could then be

used in conjunction with cartilage transplants. Although the success of the available treatment options grew with time, all of these options still require significant surgical damage to the joint

which can temporarily increase pain and reduce mobility, as well as cause major scarring of the area.

Some of the newest treatment options for joint repair use Platelet-Rich Plasma (PRP) and stem cells from the patient's own body to rebuild the tissue without a transplant. This technology is now available for your pets through Ardent Animal Health's ActiStem treatments!

What exactly is a stem cell? Multipotent stem cells are the immature cells found in continuously growing tissues such as in the skin, the lining of the stomach, bone marrow, and fat! It is thanks to stem cells that many of your tissues can easily regenerate if the body is wounded. The cells around the wound summon stem cells to the damaged areas where they exit their immature state and copy the structure of the mature cells around them. They become identical to the surrounding cells, thus rebuilding the lost tissue. This the way the body naturally heals itself. This process can become less effective as the body ages, as the amount and distribution of stem cells can decrease over time.



In older bodies, stem cells are easiest to come by in tissues like your bone marrow, skin, and fat, and much harder to find around the cartilage of your joints. If only there was a way to easily collect the immature stem cells from these tissues and have them mature into cartilage and ligaments in the joints...

Not only is there a way – but this treatment is available to your pet  
**NOW.**

Ardent Animal Health partners with veterinary offices like Coffey's Veterinary Center around the country to provide this amazing new treatment to thousands of pets. Ardent supplies veterinarians with materials for ActiStem therapy and provides training and certification for veterinary staff.

**Actistem Therapy is a same day, affordable, all-natural option for pet's suffering from:**

- Arthritis
- Hip Dysplasia
- Degenerative Joint Disease
- Soft Tissue Injuries
- And more!

#regenerativemedicine

**ACTI-STEM THERAPY**



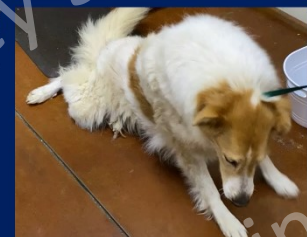
First, a sample of your pet's excess fat is collected surgically under general anesthesia. The procedure is no more complicated than a routine spay. The immature stem cells are separated from the mature fat cells and concentrated into a serum which is combined with Platelet-Rich Plasma to

maximize healing. The stem cells are primed to mature and then the mixture is injected via needle into regions with damaged tissue. The stem cells can then copy the surrounding mature cells, naturally generating more of the degraded tissue!

Our patients have greatly benefitted from this innovative new treatment. Several of our patients have fully regained their mobility and no longer require any pain medication. Minor improvements in mobility can be observed just a few days after treatment, but the therapy becomes more effective over the months following treatment. We have witnessed dramatic improvements in patient conditions between three and four months after treatment. Many of our patients do not require more than one ActiStem treatment and retain the full benefit of that singular treatment for years afterwards.

Though many of our patients do not require repeated treatments, stem cells can be placed in long-term storage in anticipation for repeated treatments. This prevents the need to surgically open the abdomen to re-collect a fat sample, making the follow-up treatments much less invasive and less expensive. Not only can Ardent store the stem cells of arthritic patients, but the company also encourages the proactive use of their storage service by storing samples collected during routine spay and neuter

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When Molly first arrived at the office, she could not properly use her back legs. She couldn't stand or walk without falling over.

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Through our partnership with Ardent Animal Health, we are able to use a sample of a patient's fat to generate activated stem cells within our own facility within twelve hours.

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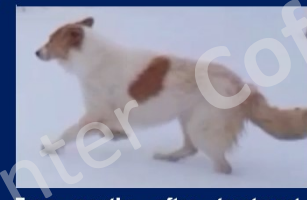
Within a week of treatment, Molly could walk with a stumbling gait. She was still unsteady, but not painful.

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Within a month of treatment, Molly was walking normally without the need of support or pain medication.

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Four months after treatment, Molly acts like any other dog - she is able to run, play, and jump with no pain medication.

procedures. The sample collection procedure does not contribute to a longer recovery time, and stem cells are immediately available in the case of accidents or injury.

### ***Stem Cell Banking***

Collecting Stem Cells early will:

- ✓ Maximise the Dosage and Effectiveness
- ✓ Reduce complications associated with Anesthesia
- ✓ Increase cell yields
- ✓ Provide a cost savings to the family

***Bank Now ...  
Save Later***

