## Regenerative Stem Cell Therapy

### What are Stem Cells?

Stem Cells are precursor cell that can develop into almost any cell type in the body. They have benefits in

- Improving healing
- Decreasing pain
- Decreasing inflammation
- Treating some diseases

# How do we obtain the Stem Cells?

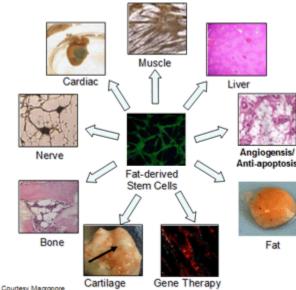
- One of the richest tissues in stem cells are body fat.
- A brief surgical procedure can harvest the fat
- The sample is sterilely prepared and sent to Vet-Stem laboratory in California

### What does the collection mean for my pet?

- Brief general anesthesia
- A 4-6 cm incision behind the sternum
- The incision is made numb, and appropriate pain medication is provided
- No running, jumping, play for 2 weeks

#### Why treat with Stem Cells?

- Proven and most commonly used in
  - o Arthritis
    - Decrease risk/need for surgery
    - Decrease use of medications and their associated potentially sideeffects
  - o Healing of bone, tendons, muscle and ligaments
- Benefits reported with
  - o immune-mediated disease
  - o Inflammatory bowel disease
  - Kidney disease



- Cartilage damage
- Congenital
- o Trauma
- Cerebral Infarction (stroke)
- Peripheral thrombosis/infarction
- Under research for use
  - Liver
  - spinal problems
  - $\circ \quad \text{other neurologic disease} \\$
- Stem Cells banked for the life of your pet

#### Why bank Stem Cells before you need them?

- Stem Cells are most robust and numerous in younger animals
- An easy addition to an elective procedure such as a spay or neuter, or any other elective procedure
- Don't have to add costs of surgery and anesthesia, or undergo another procedure at an older age

#### What does it cost?

- Harvesting and banking of stem cells
  - \$450 add-on to another surgical procedure
  - Initial cost includes first year of banking
  - \$50/year banking for life of pet
- Harvest and treat directly (inject 48 hours post-harvest)
  - \$1800-2000 as an add-on to another procedure (including second sedation and treatment)
- Dr. Christiansen can discuss all options for the short and long-term at a consult.

#### Are there any side effects?

- Since it is the patient's own cells, there is no inflammatory reaction
- No systemic adverse events reported and < 0.5% local tissue reactions

## What about practices that process/prepare Stem Cells in-hospital and are a lot less expensive?

- Vet-Stem samples
  - Prepared in a sterile environment
  - No pets or their waste products are in the facility
  - Dedicated and specially trained technicians and staff performing harvesting, counting, and dosing
  - Lifelong service and customer care



- In-hospital kits
  - Poorer quality control
  - May result in inferior samples
  - Potentially greater risk of infection (which can be crippling or even fatal)

For further information, please review the <u>Vet-Stem website</u> - <u>http://www.vet-stem.com/</u>