

## **ART** <u>Canine</u> Injecting Protocol

## Materials:

- Buffered physiological solution (Ex: Lactated Ringer's solution)
- Water bath (37°C) or body temperature water in a cup
- Syringe and at least a 20 gauge needle (so that cells are not damaged)

## **Procedure:**

- We recommend the use of NSAIDs just prior to treatment.
- Leave the tubes on dry ice as long as possible. The cell thawing protocol usually takes less than 5 minutes and should be done just prior to injection.
- To maximize viability, thaw the cell suspension as quickly as possible by swirling the tubes in a 37°C water bath. Thaw until the suspension is completely melted but minimize heating the suspension above melt.
- The cells are dehydrated in a high protein solution and sensitive to osmotic changes. Therefore, add equal volume of the buffered physiological solution (0.5ml LRS) slowly by adding several drops at a time and briefly swirling to mix. Spend about 90 seconds adding the buffer solution.
- Inject the cell suspension as soon as possible after thawing. The cell suspension can be mixed with hyaluronan (this is highly recommended for IA use) prior to injection but should not be mixed with antibiotics. Store on ice if additional time is needed between reconstitution and injection.

Questions please call 970-212-0749

Thank you for using the ARTstem service

Advanced Regenerative Therapies 320 East Vine Drive Suite 122 Fort Collins, CO 80524

www.art4dvm.com