

## **ART Canine Ilial Bone Marrow Aspiration Protocol**

The ilium is one of the preferred locations for bone marrow aspiration. This procedure can be easily utilized in a sedated, locally anesthetized dog.

- **Step 1.** Sedate dog with sedative of choice, based on assessment of patient risk.
- **Step 2.** Aseptically prepare the region around the ilium. Identify the ilial wing and inject 1-2 ml of a 2% lidocaine solution to locally anesthetize the area.
- **Step 3.** Make stab incision at wing down to the periosteum using a #11 scalpel blade.
- **Step 4.** Insert an 18-20 ga Jamshidi needle using a moderate amount of rotating force until the end of the needle extends approximately 4 mm into the ilium (cortical thickness of the ilial wing is 2-3 mm)
- **Step 5.** Remove the obturator from the Jamshidi needle and attach a 10cc syringe pre-loaded with sodium heparin solution directly to the needle.
- Note: Preload syringe with 100 units of sodium heparin for each 1 ml of anticipated bone marrow drawn (~500U/5ml).
- **Step 6**. Obtain **3-5ml** of bone marrow aspirate. (If dog is small, obtain ~1.0ml of aspirate)
- Note: To create sufficient negative pressure for aspiration of the thick bone marrow it may be necessary to withdraw the plunger the length of the syringe.
- **Step 7.** After 3-5ml of marrow has been collected, detach syringe and seal with syringe cap and tape.
- Note: It is not necessary to transfer the marrow from aspiration syringes to a different container for shipment.
- **Step 8.** Remove Jamshidi needle.
- **Step 9.** Obtain 8-10ml blood sample in serum collection tubes. (Serum is used for cryopreservation of stem cells)
- **Step 10.** Package and ship aspirate containing syringes along with blood sample tubes according to ART Shipping Instructions.

Please complete the submission form and send with the bone marrow and serum sample to:

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

Questions please call 970-212-0749

www.art4dvm.com