**Intramuscular Injection in an Adult Mouse**

1. **Scope:** General procedures used for intramuscular injection in adult mice.
2. **Materials:**
   1. Injectable substance, as described in approved IACUC protocol
   2. Insulin Syringe (0.3 or 1.0 mL depending on injection volume)
   3. Alcohol wipes
   4. Needle recapper (as needed).
   5. Approved disinfectant
   6. Balance (Scout Pro Balance or equivalent)
3. **Safety:**
   1. Biohazard sharps disposal container

**Warning: Personal Protective Equipment (PPE) should be used at all times while operating this protocol. If you are unsure what PPE you should be using, see your immediate supervisor.**

1. **Output:** 
   1. Adult mouse that has received an intramuscular dose of a compound specified by an approved IACUC protocol.

**Only IACUC approved and appropriately trained personnel may perform this procedure.**

1. **Methodology:**
   1. Retrieve animals from designated location by verifying cage card number and LabTracks ID match the LabTracks task.
   2. Before beginning procedure, double check the cage number, LabTracks ID, ear notches, sex and tattoos of the requested animal match the LabTracks task.
   3. Weigh animal or confirm weight of animal previously recorded on cage card.
   4. Consult dosing chart from Standard of Care Protocol to verify dose appropriate for weight of animal.
   5. If the injectable substance is in a bottle with a rubber stopper, wipe the top of the bottle with an alcohol wipe before inserting the needle.
   6. Fill the syringe with the appropriate amount of specified injectable compound plus a little extra.
   7. Invert and flick syringe gently, ensure bubbles have been removed as necessary.
   8. Expel any extra solution from the syringe until the exact dosing volume is achieved.
   9. When transporting syringes, needles should be capped using recapper.
   10. Place mouse on a surface where it can gain some traction.
   11. Grab the mouse at the base of the tail. Isolate the hind leg by either elongating the animal or elevating the hind quarters. Allow mouse to hold onto a surface with the front legs.
       1. Alternatively, mice may be scruffed during dosing to prevent tissue damage or injury.
   12. Insert the needle into the hamstring muscle to a depth of approximately 2-3 mm. Inject with moderate pressure and speed to prevent tissue damage. **Note**: the injection site may vary. Appropriate injection targets include the thigh muscles caudal to the femur (semitendinosus – semimembranosus), thigh muscles cranial to the femur (quadriceps), the tibialis anterior, rectus femoris, and gluteus muscles.
   13. Remove syringe/needle from mouse.
   14. Place mouse back into the cage.
   15. Record on cage card and LabTracks task the substance, route, volume, date, time, and initials of person completing the injection.
   16. Return cage to originating rack. Check that QD is functioning properly.
   17. Repeat until all animals requiring dosing have been completed.
2. **Take Down:**
   1. Complete LabTracks task.
   2. Check that the lot number of substance has been identified and recorded on the LabTracks task.
   3. Return injectable reagent to appropriate storage location.
   4. Clean work area where injections were performed with approved disinfectant.
3. **Disposal:**
   1. Dispose of syringe/needle in an approved biohazard sharps disposal container. Do not re-cap needle. Do not fill container more than 2/3 full.
   2. Retain all expired or unused material for disposal by Stericycle or other authorized Reverse Distributor.
4. **Technical Information:** 
   1. Standard of Care Protocol