**Subcutaneous Injection in an Adult Mouse**

1. **Scope:** General procedures used for subcutaneous injection in adult mice.
2. **Materials:**
   1. Injectable substance, as described in approved IACUC protocol
   2. Sterile disposable syringe with Luer-Lok Tip with sterile needle, or sterile disposable syringe with attached needle, sized appropriately for quantity of injectable substance
   3. Alcohol wipes
   4. Approved disinfectant
   5. Needle recapper (as needed)
   6. Balance (Scout Pro Balance or equivalent)
3. **Safety:**
   1. Biohazard sharps disposal container
   2. **Only IACUC approved and appropriately trained personnel may perform this procedure.**

**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 a subcutaneous dose of an approved compound as specified by an approved IACUC protocol.
2. **Methodology:**
   1. Retrieve animals from designated space 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 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 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 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. Manually restrain mouse by holding the tail in one hand and pinching the target skin of the animal with the other. Typically, a subcutaneous injection will either be given at the back of the neck or towards the posterior end of the body.
   12. Insert needle into the tent of skin created to a depth of approximately 2-3 mm. Keep needle parallel with mouse’s body to avoid penetrating muscle tissue or hitting the spine.
   13. Press plunger to inject with moderate pressure and speed to prevent tissue damage.
   14. Remove syringe/needle from mouse.
   15. Place mouse back into the cage.
   16. Record on cage card and the LabTracks task, the substance, route, volume, date, time, and initials of person completing the injection.
   17. Return cage to originating rack. Check that QD is functioning properly.
   18. Repeat until all animals requiring dosing have been completed.
3. **Take Down:**
   1. Complete LabTracks task.
   2. Check that the lot number of the 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.
4. **Disposal:**
   1. Dispose of syringe/needle in an approved biohazard sharps disposal container. Do not re-cap used needle. Do not fill container more than 2/3 full.
   2. Retain all expired or unused legend drugs for disposal by Stericycle or other authorized Reverse Distributor.