

## Quick Reference Summary Sheet

# Subcutaneous Injections in Adult Mice

### Procedure:

1. Pre-warm sterile substance to be administered. Do not exceed 37°C.
2. Weigh animal. Calculate volume to administer
  - a. Drug administration maximum = 5ml/kg/site; 10ml/kg total
  - b. Fluid administration maximum = 20ml/kg/site; 40ml/kg total
3. Fill an appropriately sized syringe and needle. Maintain sterility.
  - a. Mice: 0.5-3 ml syringe, 25-27G; 5/8" or smaller needle
4. Restrain animal appropriately to safely allow skin access for injection.
  - a. Scruff with non-dominant hand, lifting skin to form a skin tent (Figures 1 and 2).
  - b. With biohazardous agents, use a restrainer and padded forceps (Figure 3) or anesthesia and padded forceps.
5. Insert needle, bevel up, through base of tented skin, parallel to body, with dominant hand (Figure 4). Insert ~2/3 of the needle length.
6. Pull back on the plunger. If no blood or air appears, inject contents and remove needle.
  - a. If blood appears (hit a capillary): replace needle and syringe and contents and re-attempt.
  - b. If air appears (exited skin): re-attempt with same needle.
7. Discard syringe and needle into sharps container. Do not recap.
8. Return animal to its cage and observe for any complications.
9. Note procedure and any complications on cage card/monitoring records.

### Potential Complications:

- Local reaction:
  - E.g. bleeding, bruising, lesion formation or swelling
- Systemic reaction:
  - E.g. weight loss, hunched, piloerection, lethargy, isolated, pain

