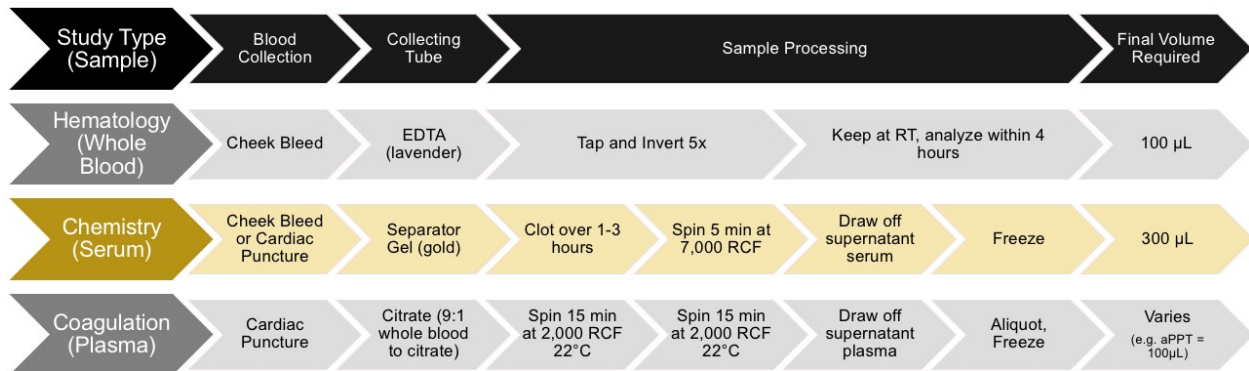


Processing Samples for Chemistry

For comprehensive metabolic panel or lipid panel



Special Considerations

- The minimum volume required is 300 μ L per each panel (e.g., a total sample volume of 600 μ L is required to request both metabolic and lipid panels). There are a few ways to meet the requirement:
 - Pooling Samples
 - Same Mouse, Multiple Survival Bleeds: may be taken over regularly spaced intervals to allow the mouse to recover. Serum is prepared after each bleed, stored, and later pooled once sufficient.
 - Different Mice, Same Group: matched for age, gender, genotype, and treatment conditions.
 - Termination Bleed
 - Sample Dilution using DI Water (note: it is not recommended to dilute the sample more than 1:2, i.e., 100 μ L DI water to 200 μ L serum. If samples are too dilute, levels of interest may not be present at high enough levels to reach the threshold of detection and will produce inaccurate or no results.)
- If fasting, plan accordingly for time of food intake or restriction prior to sampling, as this may affect results.

Procedure

1. Collect blood into a Microtainer Serum Separator Tube(s) (SST, Gold, P/N: BD 365967).
2. Blood is allowed to clot over 4 h at room temperature.
3. Blood in the SST is then spun for 5 min at 7,000 rcf.
4. Serum supernatant is removed and placed into a 1.5-mL microfuge tube.
5. If not immediately analyzed, serum is aliquoted and frozen at -80°C. Avoid multiple freeze-thaw cycles.

6. Analysis is done using a Cobas 8000 automated chemistry analyzer (Roche) with a general coefficient of variance of <5%.