

### **Special Specimen Collection Procedure for Coagulation Testing**

The accuracy of hemostasis testing depends upon the quality of the specimen submitted. To ensure the best possible results, follow the collection requirements as closely as possible.

### **Collection of Blood Specimens from Indwelling Catheters**

When specimens are collected from indwelling catheters, in order to prevent possible heparin contamination or specimen dilution, the line should be flushed with 5 mL of saline. The first 5 mL of blood or 6-times the line volume (dead space volume) of the catheter must be discarded before the coagulation tube is filled.

### **Collection of Citrated Plasma for Coagulation Testing**

1. Draw blood into a 3.2% buffered sodium citrate collection tube (light blue top) filled to the proper level. A discard tube is not needed prior to the collection of coagulation samples except when using a safety winged blood collection device (butterfly), in which case a red-top discard tube should be collected. The red-top tube may be used for testing requiring serum or discarded. Failure to use a discard tube when using a butterfly collection device may lead to under filling of the sodium citrate tube. If the patient's hematocrit is >55%, the volume of anticoagulant in the tube should be adjusted. Use the following formula to determine the correct anticoagulant volume:  
Anticoagulant volume:  $(100 - \text{Hct}) \times \text{blood draw volume required in blood collection tube} / (595 - \text{Hct}) - \text{volume of anticoagulant to be used}$ .
2. Invert gently 6 times to mix. Process immediately.
3. Centrifuge for 15 min at 2500 x g.
4. Repeat centrifugation at 2500 x g for 15 minutes to assure complete platelet removal.
5. Remove plasma using a plastic transfer pipette and dispense the plasma into 1 or more screw-capped plastic vials. Label tubes appropriately.
6. Freeze immediately at -20°C.
7. Specimen must remain frozen at all times. Ship within 24 hours on dry ice.

## APPENDIX – Coagulation

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