COAGULATION TEST COLLECTION

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 patients 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 – Hct) x blood draw volume required in blood collection tube/(595) – Hct) – 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