

# Hemostasis/Thrombosis Specimen Collection

In order to produce valid results for hemostasis testing, specimen integrity is crucial and must be maintained. All specimens sent for testing must be collected and shipped in the following manner:

1. Obtain venous blood by clean venipuncture. Avoid slow flowing draws and/or traumatic venipuncture, as either of these may result in an activated or clotted sample. Do not use needles smaller than 22 gauge.
2. Sodium Citrate (light blue) tubes must be properly filled and mixed by gentle inversion, 3-4 times. Plasma from under filled Sodium Citrate tubes may cause erroneous results; therefore the blood to anticoagulant ratio must be strictly maintained.
3. **Platelet Function Screen** testing is performed on whole blood, drawn in a Sodium Citrate (light blue) tube. **DO NOT SPIN**. Unspun samples must be received in the Coagulation department within 4 hours of draw. Platelet Function Tests should be drawn using a 21 gauge needle when possible, and may not travel through pneumatic tube systems.
4. **Plavix Assay testing** is drawn in a Grenier 2.0 ml draw vacuum tube. (light blue and white cap). **DO NOT SPIN**. Unspun samples must be received in the Coagulation department within 4 hours of draw and may not travel through pneumatic tube systems.
5. For hemostasis testing requiring platelet poor plasma, immediately centrifuge the capped Citrate tubes at 3500 rpm for 10 minutes (minimum 1700 x g RCF 15 minutes) If possible, test plasma for residual platelets. Platelet Poor Plasma should have a platelet count of less than 10,000/cmm. Respin plasma and retest platelet if necessary to achieve a platelet count less than 10,000.
6. **Place Platelet Poor Plasma** in a **minimum of two 1.0ml aliquots** in plastic, screw top transport tubes. Clearly label with patient information and an identifier such as PLASMA or BLUE TOP. (Serum aliquots should be labelled SERUM.) Standard barcode labels will not remain adhered to tubes in -70 degree or dry ice temperatures. Labels may be reinforced with Scotch type tape, or labelled with permanent marker. Glass tubes and non-screw top tubes are unacceptable.
7. Freeze serum and plasma aliquots in a -60 C to -70 C freezer when possible. Alternately, a \*Quick-Freeze procedure will be acceptable. Samples must be shipped in sufficient dry ice to prevent thawing. Thawed samples are unacceptable and will require recollection.

8. All requests for thrombophilia testing (Hypercoagulable Panels) must include a patient history including a medication list if applicable. Supra-therapeutic heparin and other anti-thrombotic medications can interfere with coagulation testing, and thrombophilia testing should not be drawn until heparin is therapeutic. Some assays may not be performed if patients are taking interfering medications.
9. Pathologist interpretation is available for both thrombophilia and bleeding disorder assessment. Please indicate on requisition if interpretation is needed. A separate fee will be charged for Pathologist interpretations, and will be billed by DCPA. If provider wishes to have a Pathologist interpretation performed at a later date, please forward that request to ALI Coagulation at #207-973-7626.
  - Quick Freeze: Place several pieces of dry ice in a plastic or metal container. Add acetone until the dry ice begins to melt. (there should be small dry ice pieces remaining) Immerse only the bottom of the plastic tube containing plasma specimen in the slurry until frozen. Do not allow the tube to “float” in the slurry, since the acetone can penetrate around the screw-top threads. Remove from slurry, dry exterior, and immediately place on dry ice.