

VENIPUNCTURE AND CENTRIFUGATION

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Required Specimen Type	Blood sample in designated tube.
Medical Supplies	<ul style="list-style-type: none"> • Disposable gloves; • Tubes; • Tourniquet; • Gauze; • Band-Aid or tape; • Biohazard bag; • Absorbent pad • Needle; • Needle holder; • Sharps container; • Biohazard waste container (contaminated with biological substances); • Antiseptics / Disinfectant (Alcohol); • All other necessary supplies for blood drawing.
General Guidelines	<ol style="list-style-type: none"> 1. All specimens must include a double identification (first and last name of the patient and date of birth or medicare number). 2. The use of gloves is required when handling all biological specimens. 3. A valid requisition must include the following information : <ul style="list-style-type: none"> • First and last name of the patient, date of birth or medicare number and gender. • Date and time of specimen collection and signature of collector. • Physician's full name, signature and license number (or other qualified prescriber). • Any relevant clinical information. • Requested tests.
Patient Preparation	See individual test requirements for the appropriate patient preparation
Specimen Collection Instructions	<ol style="list-style-type: none"> 1) Wash or disinfect hands prior to specimen collection. 2) Prepare all the documents related to the analysis. Make sure: <ul style="list-style-type: none"> ▪ To understand the requisition; ▪ To have all the documents pertinent to this request; ▪ Indicate the phlebotomist's name or initials on the requisition and include the specimen collection date and time. 3) Prepare the necessary medical supplies (consult the CDL catalogue or contact the laboratory for test information); 4) Call the patient by their first and last name : <ul style="list-style-type: none"> ▪ Introduce yourself (name); ▪ Verify the patient identification: <ul style="list-style-type: none"> ➢ His/her name; ➢ His/her date of birth. ▪ Ask the patient if they agree to proceed with the sample collection (legal aspect). 5) Inform and reassure the patient : <ul style="list-style-type: none"> ▪ Explain the procedure; ▪ Ask if the patient has had any adverse reactions (e.g., fainting, allergies for latex, etc) with previous phlebotomies; ▪ Inform the patient of the possibility of experiencing some discomfort during the specimen collection process. ▪ Do not provide technical information to the patient regarding diagnostic testing. For any technical information, refer to a technician. 6) Ensure the requirements for the analysis are followed : <ul style="list-style-type: none"> ▪ Special dietary instructions (fasting, special diet restrictions, etc.); ▪ Sample collection at specific time or interval; ▪ Special indications; 7) Seat the patient comfortably in the phlebotomy chair; 8) Prepare all the material needed for the blood draw (barillet, tourniquet ,needle etc.); 9) Assess the puncture site; 10) Place the tourniquet on the patient's arm approximately 3-4 inches above the insertion site with enough pressure to stop venous flow; 11) Ask the patient to make a fist and choose the vein; 12) Put on gloves; 13) Clean the area with the appropriate disinfectant; cleanse the area in a circular motion,

- beginning at the site and working outward. Let the area air-dry;
- 14) Put the needle on the needle holder and remove the cap;
 - 15) Perform the venipuncture and collect the appropriate specimen(s) in order (refer to the table below);

ORDER OF SPECIMEN COLLECTION

Order	Description
1	Preservative aerobic
2	Anaerobic
3	Without Additive
4	Sodium Citrate
5	Coagulation activator
6	Heparin
7	EDTA
8	NaF/KOx

- 16) Remove the tourniquet when there is adequate blood flow. A tourniquet should not be left on more than one minute;
- 17) Make sure tubes are completely filled;
- 18) Remove the last tube drawn and carefully remove the needle from the vein;
- 19) Apply light pressure to the puncture site with a gauze pad. Do not apply pressure if you have not removed the needle, this is very painful for the patient;
- 20) Instruct the patient to keep firm pressure on the puncture site for at least 3 minutes, with the arm hyper extended;
- 21) All tubes containing additives should be mixed gently 5-10 times unless the protocol stipulates differently. Invert the tubes **5 times for gel (serum) tube and 10 times for all others (lavender, light blue...)** in order to mix the blood with the additive (see document LA-75-WI-010B);
- 22) Dispose of the used needle with extreme caution in the needle disposal container. DO NOT RECAP ANY NEEDLES.**
- 23) Immediately label the patient(s) tube (s) with their full name and date of birth or Medicare card number (Double identification of all samples is necessary). **Note: Any specimen that is not properly identified will not be accepted by the laboratory.**
- 24) Place the patient's tubes in a rack to allow the blood to clot in the vacutainer without additive;
- 25) Verify the puncture site to make sure there's no bleeding and apply a new gauze with tape;
- 26) Discard all contaminated supplies used for the venipuncture in a biohazard waste container or sharps container;
- 27) Handle tubes according to the requirements for preparation and storage (refrigeration, centrifugation, etc.). See centrifugation instructions below;
- 28) Place the tubes in the biohazard bag with the absorbent pad and seal;
- 29) Remove gloves;
- 30) Insert the requisition in the side pocket of the biohazard bag;
- 31) If no other tests are required for the patient, inform them that the dietary restrictions are now over;
- 32) Wash or disinfect hands;
- 33) Return all samples to the laboratory as soon as possible.

Additional Information

N/A

Specimen Conservation and Stability

CENTRIFUGATION PROCEDURE

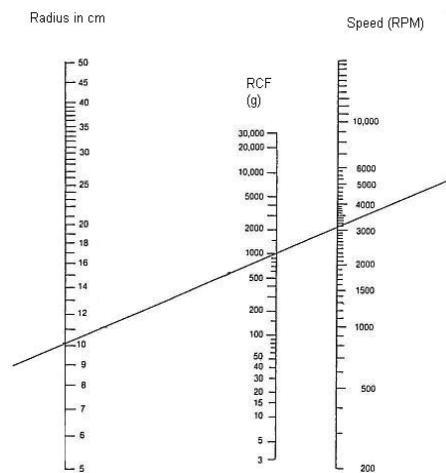
- 1) Place tubes in an upright position, and allow blood to clot thoroughly before centrifugation. Clotting time for non anticoagulant tubes is 30 minutes.**

- 2) Place tubes to be centrifuged in the sample holders or racks. The opposite tubes must be of the same weight and height. A tube of water can be used as a counterbalance. Smaller tubes are often too short to place directly in the rotor. A rubber stopper must be added in order to provide support.
- 3) Select THE time period.

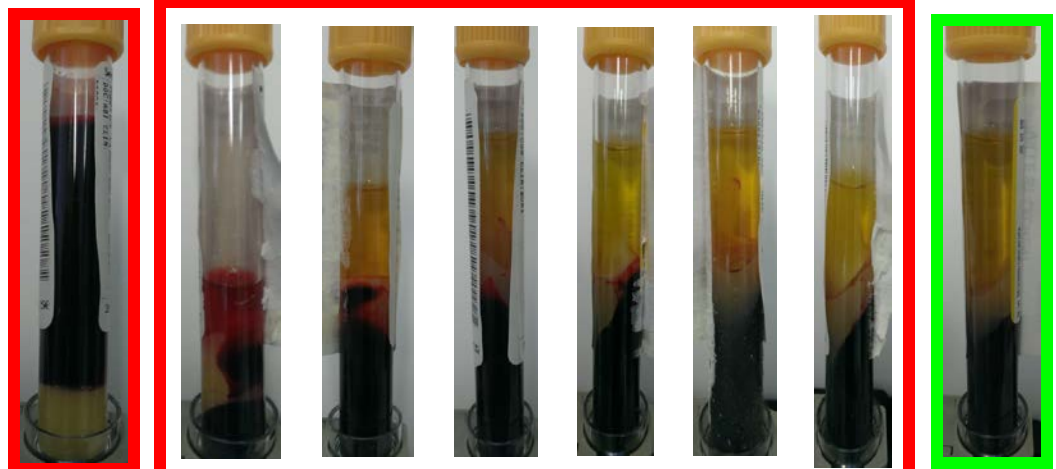
CENTRIFUGATION TIME FOR BENCHTOP CENTRIFUGES

Tube	RCF	Time (min.)
Blood samples (SST, red, lavender, etc.)	1200	15
Light blue tubes for coagulation testing	1200	24

To determine the required rpm for a specific centrifuge, measure the radius of the centrifuge (in cm) and use the required RCF from the table above. See example below.



- 4) Close and lock the lid of the centrifuge and press the start button.
- 5) Open the centrifuge lid after it has come to a complete stop.
 Note: In case of a tube breaking in the centrifuge, an emergency stop can be performed. Wait at least 30 minutes before opening the lid. Wear gloves before handling the broken pieces. Remove the rotor sample basket and clean with a 2% solution of Glutaraldehyde followed by a rinse with water. Discard the broken tube in a biohazard waste container.
- 6) Remove the tubes from the centrifuge and return to step 2.

Example of correctly centrifuged tubes

 NOT
 CENTRIFUGED

INCORRECTLY CENTRIFUGED

CENTRIFUGED