

September 2021

To: Clients of the New York Hospital Laboratories (NYHL)

From: NYHL Management

Subject: **Urgent: Centrifugation Requirement for Gel Barrier Tubes (Gold SST/White PPT)**

Dear Valued NYHL Client,

Effective immediately, centrifugation for gel barrier tubes such as GOLD top Serum Separator Tubes (SST) or WHITE top Plasma Preparation Tubes (PPT) is **required** by our laboratory. Centrifuging is a known industry standard and is an integral part of preparing a quality specimen *ensuring* specimen viability and *lab result accuracy*. It is important to centrifuge gel barrier specimens within **TWO HOURS** of collection, separating cells from supernatant (serum and plasma). If not centrifuged, cells interact with the serum/plasma, *altering its chemical composition and affecting test results*. The longer the serum/plasma remains in contact with cells, the greater the effect on the test results, *potentially leading to falsely high/low or critical values*.

***Please note:** *Non-centrifuged specimens collected in gel barrier tubes may be canceled due to lack of suitability for testing.*

Proper guidelines for preparing serum/plasma specimens collected in gel barrier tubes (GOLD top SST or WHITE top PPT) are:

- Allow SST specimen to fully clot (30 minutes) before centrifugation. PPT (Plasma Preparation Tubes) do NOT require clotting prior to centrifuging.
- Separate serum/plasma from red cells by centrifuging within **TWO HOURS**.
- Avoid hemolysis caused by various factors, i.e. prolonged tourniquet use, wrong size needle/syringe, etc.

* Please refer to the back of this Memo for more information about preparing a quality specimen using fixed angle rotor centrifuges provided by our laboratory, as well as the Becton Dickinson (BD) recommended order of draw as a refresher.

*** If you require a centrifuge, contact your Laboratory Sales Representative, or Client Services and ask to speak to a Supervisor.**

For any questions, contact the Client Services Department at (212) 746-0670, who can also put you in touch with our Laboratory Directorship for further assistance.

We appreciate your continued support and partnership with the Laboratories at New York-Presbyterian Hospital/Weill Cornell Medical Center.

How to Prepare a Quality Specimen Using a Fixed Angle Centrifuge

Invert 5 Times



SST™ Gel Separator Tube

Gently invert 5 times to mix clot activator with blood.

Clot 30 Minutes



Clot 30 Minutes

Allow blood to clot for a minimum of 30 minutes in a vertical position.

Centrifuge Preparation:

Place specimen in centrifuge, balance tube in centrifuge. Adjust balance tube volume to be equal weight of those tubes located across from each other in centrifuge. Centrifuge at **FULL SPEED** (between 1100 and 1300g) for 15 minutes for fixed angle units.



Spin 15 Minutes



Spin 15 Minutes

Barrier will form, separating serum specimen from clot.

An inversion is one complete turn of the wrist, 180 degrees, and back.

PPT (Plasma Preparation Tubes): Gently invert 8 times to mix and centrifuge at **FULL SPEED** (between 1100 and 1300g) for 15 minutes. Clotting before centrifugation is *not* necessary.

BD Vacutainer Specimen Collection- Tube Types & Order of Draw for Multiple Tube Collections

Blood Cultures, should always be collected first, once collected please invert 8-10 times

* When using a winged blood collection set for venipuncture and a coagulation (sodium citrate) tube is the first specimen tube to be drawn, a discard tube should be drawn first. The discard tube must be used to fill the blood collection set tubing's "dead space" with blood but the discard tube does not need to be completely filled. This important step will ensure proper blood to-additive ratio. The discard tube should be a nonadditive or coagulation tube.

Invert 3 - 4 Times	Invert 5 Times	Invert 5 Times	Invert 8 - 10 Times	Invert 8 Times	Invert 8 Times	Invert 8 Times	Invert 8 Times	Invert 8 Times	Invert 5 Times
*SODIUM CITRATE	SST™ Gel Separator Tube	Serum Tube	Lithium Heparin or Sodium Heparin	K2EDTA (spray coated)	K3EDTA (spray coated)	K2EDTA or Traced Element Serum	PPT™ Separator Tube K2EDTA with Gel	Sodium Fluoride/ Potassium Oxalate	ACD Solution A or B