







ORDER OF DRAW, STOPPER COLOURS, TUBE INVERSIONS AND RATIONALE FOR COLLECTION ORDER

Not following the following order of draw may cause inaccurate test results (especially coagulation results), cross contamination of additives in lab tubes, and contamination of blood cultures.

(Ref: CSLI Standard H3-A6 revision November 2007)

Order of Draw	Tube Stopper Colour	Tube Inversion	Rationale for the Collection Order
Blood culture (sterile collections)		8-10X	Minimise microbial contamination
Coagulation tubes	Light blue 	4 X	The first additive tube in order because all other additives affect coagulation tests
Glass plain tubes	Red 	Nil	Prevent contamination by other additives in other tubes. Plain glass tube should be drawn before the plastic serum tube with SST.
Clot activator, silicon coated (plastic) tubes	Red 	5 X	Filled after coagulation tests because silica particles in the plastic tubes activate clotting and affect coagulation tests (carry-over of silica into subsequent tubes can be overridden by anticoagulant in them)
SST clot activator, gel separator tubes	Gold 	5 X	
Heparin tubes	Green 	8 X	Causes the least interference in tests other than coagulation tests
EDTA tubes	Lavender 	8 X	Responsible for more carry-over problems than any additive. It elevates Na ⁺ and K ⁺ levels, chelates and decreases Ca ⁺⁺ and Fe levels, elevates PT and APTT results.
Oxalate / fluoride tubes	Gray 	8 X	Oxalate is used after haematology tube (lavender stopper) because oxalate interferes in enzyme reaction, damages cell membranes and causes abnormal RBC morphology.