UCSDH CLINICAL LABORATORIES APPROVED ORDER OF DRAW and RATIONALE

Order	Color	Tube Type	Inversions	Tests	Rationale
1	 Blue/Violet	Blood Culture (plastic bottle)	8-10	Blood Pathogens	➢ Blue/violet sterile blood culture bottles (**in that order**) should be drawn first o To prevent contamination from non-sterile tubes o Blue aerobic bottles before violet anaerobic bottles – oxygen contamination occurs in the first collection
2*	 Light Blue	Citrate	3-4	Coagulation	➢ Light blue citrate tubes before tubes with clot activator or stronger anticoagulants o To prevent adverse effects on coagulation studies (falsely reduced or prolonged PT and PTT) o Must be filled to the specified level to maintain the proper ratio of blood to anticoagulant to prevent falsely prolonged PT and PTT. *An additional blue tube must be drawn and discarded if this is the first specimen drawn.
3	 Red	Silica or glass particles	5	Serology	➢ Red tubes must be drawn after the blue top to avoid falsely decreased **PT** and **PTT**. ➢ Can be filled before green, lavender, and gray tubes because carry-over of clot activator will be overridden by strong anticoagulants (heparin, EDTA, oxalate)
4**	 Yellow	SST w/ silica or glass particles	5-8	Special Chemistry	➢ Yellow serum separator tubes with clot activator must be drawn before green, lavender, and gray top tubes o Carry-over of clot activator will be overridden by strong anticoagulants (heparin, EDTA, oxalate) **Yellow SST tubes should be allowed to sit 15 min. before centrifuging.
5	 Green	Li Heparin (PST) Na Heparin	8-10	Routine and STAT Chemistry	➢ Li Heparin (Light green) tube must be drawn before the Na Heparin Green tubes. ➢ Must be drawn before Lavender to prevent contamination from EDTA.
6	 Lavender	EDTA	8-10	Hematology; Chemistry; Blood Bank	➢ Lavender EDTA tubes are responsible for more carry over problems than any other additive. o False elevation of **Na** and **K** levels if drawn before green, red or yellow top. o Reduction in **Ca** and **Fe** levels if drawn before green, red or yellow top o Prolonged **PT** and **PTT** if drawn before blue top
7	 Gray	Fluoride and Oxalate	8-10	Glucose	➢ Gray sodium fluoride/potassium oxalate tubes last o After green tubes for electrolyte measurement – elevation of Na and K levels o After lavender tubes for hematology - oxalate damages cell membranes and causes abnormal RBC morphology

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