








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	<ul style="list-style-type: none"> ➤ Blue/violet sterile blood culture bottles (in that order) should be drawn first <ul style="list-style-type: none"> ○ To prevent contamination from non-sterile tubes ○ Blue aerobic bottles before violet anaerobic bottles – oxygen contamination occurs in the first collection
2*	 Light Blue	Citrate	3-4	Coagulation	<ul style="list-style-type: none"> ➤ Light blue citrate tubes before tubes with clot activator or stronger anticoagulants <ul style="list-style-type: none"> ○ To prevent adverse effects on coagulation studies (falsely reduced or prolonged PT and PTT) ○ Must be filled to the specified level to maintain the proper ratio of blood to anticoagulant to prevent falsely prolonged PT and PTT. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> *An additional blue tube must be drawn and discarded if this is the first specimen drawn. </div>
3	 Red	Silica or glass particles	5	Blood Bank; Serology	<ul style="list-style-type: none"> ➤ 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	Routine and Special Chemistry	<ul style="list-style-type: none"> ➤ Yellow serum separator tubes with clot activator must be drawn before green, lavender, and gray top tubes <ul style="list-style-type: none"> ○ Carry-over of clot activator will be overridden by strong anticoagulants (heparin, EDTA, oxalate) <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> **Yellow SST tubes should be allowed to sit 15 min. before centrifuging. </div>
5	 Green	Li Heparin (PST) Na Heparin	8-10	Routine and STAT Chemistry	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Lavender EDTA tubes are responsible for more carry over problems than any other additive. <ul style="list-style-type: none"> ○ False elevation of Na and K levels if drawn before green, red or yellow top. ○ Reduction in Ca and Fe levels if drawn before green, red or yellow top ○ Prolonged PT and PTT if drawn before blue top
7	 Gray	Fluoride and Oxalate	8-10	Glucose, Lactic Acid	<ul style="list-style-type: none"> ➤ Gray sodium fluoride/potassium oxalate tubes last <ul style="list-style-type: none"> ○ After green tubes for electrolyte measurement – elevation of Na and K levels ○ After lavender tubes for hematology - oxalate damages cell membranes and causes abnormal RBC morphology