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| 1     | Blue/Violet | Blood Culture (plastic bottle) | 8-10       | Blood Pathogens        | ➢ Blue/violet sterile blood culture bottles (in that order) should be drawn first  
  ○ 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            | ➢ Light blue citrate tubes before tubes with clot activator or stronger anticoagulants  
  ○ 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.  
  *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  
  ○ 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)         | 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.  
  ○ 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                | ➢ Gray sodium fluoride/potassium oxalate tubes last  
  ○ 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 |