Pediatric Blood Sample Algorithm

1. Is the patient younger than 12 months?
   - No: Does the patient have a low white cell count?
     - No: Draw 4-6 ml whole blood in EDTA tubes
     - Yes: Draw a minimum of 3 ml whole blood in EDTA tube(s)
   - Yes: Is the patient a critically ill inpatient or underweight newborn?
     - No: Draw a minimum of 3 ml whole blood in EDTA tube(s)
     - Yes: You may draw a small volume of blood into EDTA tubes over several days until you obtain 3ml of pooled samples. Keep all samples refrigerated.

Consider an alternate sample source: 2 to 3 T25 flasks of cultured fibroblasts** or DNA extracted from a skin biopsy, saliva, or buccal sample. If a second source is not possible, please draw an additional 9ml whole blood in EDTA tubes.

2. Is this the first sample for this patient?
   - No: Accept an alternate sample source: 2 to 3 T25 flasks of cultured fibroblasts** or DNA extracted from a skin biopsy, saliva, or buccal sample. If a second source is not possible, please draw an additional 9ml whole blood in EDTA tubes.
   - Yes: Draw a minimum of 9ml whole blood in EDTA tubes

**If sending cultured cells, a backup culture should be maintained by the referring institution or lab until testing is complete.

Accepted Blood Tubes

Preferred: Lavender/Purple top (K$_2$EDTA)

Also accepted: Pink, White or Tan top (K$_2$EDTA); Yellow top (ACD-Solution A; Solution B); Light Blue top (Sodium Citrate)

We cannot accept:
- Green top (lithium or sodium heparin)
- Red top (clot activator)
- Blue top (Royal: clot activator; Light: CTAD)