



KAISER PERMANENTE®
COLORADO LABORATORY

ONCOLOGY MANUAL AND SCREENING DIFFERENTIAL CRITERIA

PURPOSE:

To standardize the process of performing a manual versus a screening differential on Oncology patients at the Franklin and Rock Creek Laboratories

1. All flagged CBC results are reviewed and verified via a stained peripheral blood smear.
2. Scans are performed when only the RBC indices, PLT flags are present and / or $WBC \geq 2.0 - 3.0$. A minimum of 10 fields must be scanned to detect the presence of any of the following:

If any of the following are noted on a scan, a manual differential must be performed

- a. Any low PLT count (below normal range) combined with a normochromic normocytic anemia
- b. > 10% bands or any metamyelocyte, myelocyte, promyelocyte or blasts seen.
- c. Any nRBC's seen
- d. >20% transformed lymphs
- e. Any immature lymphs or monos

If none of the above are noted upon scanning of 10 fields, the automated differential may be released and the following results are reported on the differential keyboard.

- f. Platelet estimate verified
 - g. Actual platelet estimate if the platelet count is < 70
 - h. RBC morphology
 - i. Diff comment (Select Scan confirmed if a scanning diff was done or Diff confirmed if a manual diff was done but automated differential was reported).
3. When performing a manual differential, the manual differential and automated differential will no longer have to agree with each other within + / - 5. You are either accepting the automated or performing a manual differential.
 4. No screening or manual differential is needed when a "Negative" message (XT only) is displayed on the result.
 5. See chart below.

Parameter and / or condition	Action
WBC	
WBC \geq 2.0 - 3.5	Scan and add Diff comment of Screen or manual confirmed.
WBC < 2.0 or > 11.0	Perform manual differential
Any ---- result on the automated differential	Perform Manual Differential
Any WBC IP message (Except for leukopenia WBC < 3.5 – see above)	Perform Manual Differential
Any Blasts on scan	Perform manual differential. If blast is seen on any pediatric patient (<21), send for pathology review
>10 % bands noted on scan	Perform Manual Differential
Any nRBC's	Perform Manual Differential
>20 % transformed lymphs	Perform Manual Differential

Parameter and / or condition	Action
RBC	
Any RBC IP message	Scan
RBC < 2.00 or > 7.00	Scan
HGB < 11.0 or >18.0	Scan
HCT < 15.0 or >60.0	Scan
MCV < 80.0 or > 100.0	Scan
RDW >19.0	Scan
PLATELET	
Any + or – Plt flag	Perform platelet estimate, report estimate if < 90
Any PLT IP message	Perform platelet estimate, report estimate if < 90
Platelet < 70	Perform and report estimate. Unless previously reviewed, send for Pathology Review
Platelet < 30	Repeat count and perform and report estimate. Unless previously reviewed, send for pathology review.
Platelet > 1000	Repeat count verify with an estimate. Unless previously reviewed, send for pathology review.
Clumped platelets	Convert result to text and result as “decreased, normal or increased. Add a comment (“Suggest redraw in sodium citrate”) if platelet EDTA clumping is observed.