



MANUAL AND SCREENING DIFFERENTIAL CRITERIA

PURPOSE

To standardize the process of performing a manual versus a screening differential

1. All flagged CBC results are reviewed and verified via a stained peripheral blood smear.
2. Scans are performed when only the RBC indices and / or PLT flags are present. 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 must be reported on the differential keyboard.

- f. Platelet count 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. For XT users only, no screening or manual differential is performed when a "NEGATIVE" message is displayed on the CBC printout.
 4. See chart below.

WBC		
CBC Parameter and / or condition	Value Limits	Action
WBC	< 3.5 or > 11.0	Manual Differential
Automated Differential	+ or -	Manual Differential
WBC and / or any automated differential	-----	Manual Differential
Any WBC IP message (XT only)	See specific WBC IP message	Manual Differential
Immature cells	Any metamylocyte, myelocyte, promyelocyte or blasts, and any immature lymphs or monos noted on scan	Manual Differential and refer to the Pathology Review Criteria. If blast is seen on any pediatric patient (< 21 years old), send for Path review
Bands	> 10% bands noted on scan	Manual Differential
nRBC's	Any nRBC's	Manual Differential
Transformed Lymphs	> 20% transformed lymphs noted on scan	Manual Differential
RBC		
CBC Parameter and / or condition	Value Limits	Action
Any RBC IP message (XT only)	See specific RBC IP message	Scan
RBC	< 2.00 or > 7.00	Scan
HGB	< 11.0 or > 18.0	Scan
HCT	< 20.0 or > 60.0	Scan
MCV	< 80.0 or > 100.0	Scan
MCH	< 20.0 or > 40.0	Scan
MCHC	< 28.0 or > 37.5	Scan
RDW	> 19.0	Scan
PLATELET		
PLT	+ or -	Perform platelet estimate, report estimate if < 70.0. Unless previously reviewed, send for Path review.
PLT	< 30	Repeat count and perform and report estimate. Unless previously reviewed, send for Path review.
PLT	Clumped platelet	Convert result to a text field and result as "decreased, normal or increased". If platelet EDTA clumping is observed, add a comment "Suggest redraw in sodium citrate".