

UnityPoint Health Pekin Laboratory HEMATOLOGY	Page 1 of 3	Section:	Policy #: UPPK HE-0635
	Approved by:	see signature block at end of document	Date: 11/26/2018
	Date Revised:		
	Date /Reviewed:		
	Policy/Revision Submitted by:	Kelly Hall, MLS (ASCP)	
CAP Standard: NA			
POLICY GUIDELINE ON: CRITERIA USED FOR ORDERING PATHOLOGY REVIEWS			

I. POLICY:

Criteria established for ordering abnormal hematology for pathologist's review.

II. PURPOSE AND STANDARD:

Certain abnormal hematology results must be reviewed by a pathologist for interpretation and correlation with a disease process.

III. SCOPE:

Hematology technologists will follow the criteria established for ordering abnormal hematology pathologist reviews.

IV. GENERAL INFORMATION:

Before verifying the results of a CBC, the technologist reviews the laboratory data and judges it against established criteria to determine if smear and/or printouts need to be reviewed by a pathologist. Peripheral blood smears showing the following numerical and/or morphologic abnormalities should be sent for pathologist's review, unless that abnormality was reviewed within the past 120 days.

Criteria were established by the pathology group and are reviewed for appropriateness every two years. Review criteria are as follows:

A. Red Blood Cells:

1. Hemoglobin of < 6.0 g/dL (hematocrit < 20%), or hemoglobin > 19.0 g/dL or hematocrit > 60%
2. MCV > 115 fL if hemoglobin is < 10 g/dL.
3. ≥ 3 nRBC (nucleated RBC) seen on diff; for newborns (defined as ≤ 3 days old) more than 15 nRBC's/100 WBC's.
4. Severe morphologic abnormalities (marked or 3+), including; elliptocytosis, target cells, tear drop cells, rouleaux formation, agglutination, or basophilic stippling.)
5. Readily apparent (at least 2-5/oil immersion field): sickle cells or schistocytes.
6. Hemoglobin crystals.

B. White Blood Cells:

1. WBC < 2.0 th/mm³ or > 30 th/mm³.
WBC > 45 th/mm³ for Newborn to 7 days.
WBC > 40 th/mm³ for infants > 7 days to 1 month.
2. Any blasts, promyelocytes, plasma cells, cells suspicious for malignancy and unclassifiable cells.
If a new acute leukemia is suspected after normal business hours, report blasts and report the critical result. The slide should be saved and sent to the clinical pathologist for review. The hematopathologist/clinical pathologist on call should be notified when the technologist is uncertain regarding the presence or absence of leukemia (>20% blasts).
3. Cells with unusual cytoplasmic granulation or inclusions.
4. Readily apparent hyposegmented or hypersegmented neutrophils.

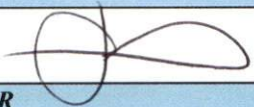
5. Absolute lymphocyte count > 5.0 th/mm³ in individuals \geq to 50 years of age or absolute lymphocyte count > 7.5 th/mm³ in individuals > 15 and < 40 years old.
 6. Absolute neutrophil count < 1.0 th/mm³.
 7. Absolute monocyte count > 2.5 th/mm³ only for patients > 40 years.
 8. Absolute eosinophil count > 2.0 th/mm³.
- C. Platelets
1. Platelet count ≤ 50 th/mm³ or > 750 th/mm³.
 2. Smears with > 5 giant platelets per 10 WBC's.
 3. Presence of circulating micromegakaryocytes.
- D. Newborns (defined as ≤ 3 days):
- Hemoglobin < 14 gm/dl or > 23 gm/dl.
WBC > 45.0 th/mm³ for Newborn to 7 days.
WBC > 40.0 th/mm³ for > 7 days to 1 month.
More than 15 nucleated RBCs/100 WBC.
- E. Miscellaneous
1. For Illinois cancer care patient, an initial smear review will be performed if met the above criteria. No additional pathology review needs to be performed with the exception of unusual findings.
 2. Smear review requested by physician.
 3. Any smear with microorganism present.
 4. For patients < 15 years of age, make sure to verify patient age and normal ranges prior to submitting for pathology review. Submit any abnormal findings that meet pathologist review criteria, for pathology review.

V. PROCEDURE

- A. A Path Review should not be ordered on known oncology patients with cytopenias or patients with a previous Path review within the past 120 days, unless this is the first time blasts or atypical cells are seen.
- B. On patients that meet at least one of the above criteria, order a pathology review (order code "PATHSM").
- C. A blood smear slide should be made, stained and reviewed by the tech. Observation of cell morphologies and abnormalities should be noted on the patient's print-out.
 - a. If a Path review is requested by the ordering physician, the tech should make a slide and examine it under a microscope for a quality check. No other observations need to be noted.
- D. Prior to sending the slide to the pathologist for review:
 - a. The Criteria that prompted the Path review should be clearly indicated on the patient's print-out.
 - b. The diagnosis and relevant history of the patient should be noted.
- E. The Pathologist will input results into the LIS

VI. MAINTENANCE AND STORAGE:

- A. All policies and procedures are reviewed every two years, (except for Safety procedures which are yearly) by Laboratory Administration and or the Medical Director of the Laboratory or designee when there are changes in practice standards, or requirements.
- B. All policies and procedures are reviewed every two years (except for Safety procedures which are yearly) by staff or at the time new or revised ones are put in effect.
- C. All policies are retained 8 years after being discontinued or revised.
- D. All procedures are retained 2 years after being discontinued or revised

MEDICAL DIRECTOR		
DATE	NAME	SIGNATURE
12-5-18	Kathryn O. Kramer	
SECTION MEDICAL DIRECTOR		

REVISION HISTORY (began tracking 2011)			
Rev	Description of Change	Author	Effective Date

Lead	Date	Coordinator	Date	Manager	Date	Director	Date
Kelly Hill	12-4-18						

Reviewed by