

Methodist Health Services Corporation & UnityPoint Health Methodist Laboratory HEMATOLOGY	Page 1 of 3	Section: UPM HEMO	Policy #: HEMO - 05
	Approved by: See signature block at end of document		Date: 03/03/2017
	Date Revised: 8/13/96; 3/14/97; 9/30/97; 7/7/00; 1/25/05,3/21/05,7/26/06, 1/19/10, 1/19/11, 12/2/11, 2/4/14, 10/16/14, 2/1/16, 03/03/17		
	Policy/Revision Submitted by: June Bembenek		
	JCAHO Standard: NA		
POLICY GUIDELINE ON: CRITERIA USED FOR ORDERING ABNORMAL HEMATOLOGY REVIEWS			

I. POLICY:

Criteria established for ordering abnormal hematology (ABN HEMAs) 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 less than 7.0 g/dL (hematocrit less than 20%), or hemoglobin of greater than 19.0 g/dL or hematocrit greater than 60%.
2. MCV less than 70 fL or greater than 115 fL.
3. ≥ 3 nRBC seen on diff; for newborns (defined as ≤ 3 days old) more than 15 nRBC's/100 WBC's.
4. RDW greater than 22 percent.
5. Severe morphologic abnormalities (marked or 3+), including; elliptocytosis, target cells, tear drop cells, rouleaux formation, agglutination, or basophilic stippling.)
6. Readily apparent (at least 2-5/oil immersion field): sickle cells or schistocytes.
7. Hemoglobin crystals.

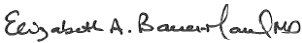

B. White Blood Cells:

1. WBC less than 2.0×10^3 /uL or greater than 30×10^3 /uL.
WBC greater than 45×10^3 /uL for Newborn to 7 days.
WBC greater than 40×10^3 /uL 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 for first AM review by the clinical pathologist. The 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 greater than $5.0 \times 10^3/\mu\text{L}$ in individuals ≥ 40 years old or absolute lymphocyte count greater than $7.5 \times 10^3/\mu\text{L}$ in individuals > 15 and < 40 years old.
 6. Absolute neutrophil count less than $1.0 \times 10^3/\mu\text{L}$.
 7. Absolute monocyte count greater than $2.5 \times 10^3/\mu\text{L}$.
 8. Absolute eosinophil count greater than $2.0 \times 10^3/\mu\text{L}$.
 9. Absolute basophile count greater than $0.2 \times 10^3/\mu\text{L}$.
- C. Platelets
1. Platelet count less than or equal to $50 \times 10^3/\mu\text{L}$ or greater than $600 \times 10^3/\mu\text{L}$.
 2. Smears with greater than 5 giant platelets per 10 WBC's.
 3. Presence of circulating micromegakaryocytes.
- D. Newborns (defined as ≤ 3 days):
- Hemoglobin less than 14 gm/dl or greater than 23 gm/dl.
WBC greater than $45.0 \times 10^3/\mu\text{L}$ for Newborn to 7 days.
WBC greater than $40.0 \times 10^3/\mu\text{L}$ for greater than 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.

V. 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

<i>MEDICAL DIRECTOR</i>		
DATE	NAME	SIGNATURE
February 11, 2017	Elizabeth A. Bauer-Marsh, M.D.	
<i>SECTION MEDICAL DIRECTOR</i>		
July 17, 2014	Julia Adams, M.D.	

REVISION HISTORY (began tracking 2011)			
Rev	Description of Change	Author	Effective Date
1	Changed the value for path review on the following analytes.. HGB, WBC, MCV, PLT and added RDW greater than 22.	R. Fitzgerald/ K. Turpin	10/16/14
2	Changed the pathology review criteria for WBC counts on Newborns to 7 days and >7 days to 1 month.	Kathy Turpin	1/4/16
3	Clarified pathology protocol for suspected leukemias	June Bembenek	3/03/17

Reviewed by

Lead	Date	Coordinator	Date	Manager	Date	Medical Director	Date
R. Fitzgerald	10/16/14	<i>Kathy L. Turpin</i>	10/16/14			<i>June Adams, M.D.</i>	10/16/14
		<i>Kathy L. Turpin</i>	1/4/16			<i>June Adams, M.D.</i>	2/1/16
Kim Paige	3/3/17	<i>June Bembenek</i>	3/3/17	<i>Kathy L. Turpin</i>	3/6/17	<i>June Adams, M.D.</i>	3/6/17