UnityPoint Health PEKIN	Page 1 of 3	Section: UPPK HEMO	Policy #: HE-0618
	Approved by: see signature block at end of document		Date 11/16/18 Review by:
HEMATOLOGY LABORATORY	Policy Created: 11/16/18 Supersedes:		
	Primary Responsible Parties: Kelly Hall, MLS		
	CAP Standard: NA		
SUBJECT: XN 2000 Analyzer to Analyzer Correlation			

I. POLICY STATEMENT:

Standard Operating Procedure for Sysmex XN-2000 Automated Hematology Analyzer Cross Check. Comparison will be performed every 6 months.

II. PURPOSE:

To ensure multiple analyzers within the laboratory are calibrated and ensure reproducibility of patient data across all analyzers.

III. POLICY SCOPE:

All Hematology technologists will follow this policy when performing patient testing.

IV. SPECIMEN:

A. Whole blood collected in K2 EDTA drawn per manufacturer's specifications for correct blood to anticoagulant ratio with a total volume of 3.0 ml available as needed to complete this study.
B. Samples should be kept at room temperature during the analysis.
C. Samples should be run on both analyzers within 4 hours.
D. Do not place samples on a mechanical blood mixer.

V. PROCEDURE:

A. Analyzer 31851 (Left side) will be considered the "reference" analyzer. Analyzer 31847 (Right Side) will be considered a test analyzer and will be compared to 31851.
B. Run 10 samples on the reference analyzer and record results for WBC, RBC, HGB, PLT, and RET%. Average the results from all ten samples for each parameter.
C. Run the same ten samples on the test analyzer and record results for WBC, RBC, HGB, HCT, MCV, PLT, and RET%. Average the results from all ten samples for each parameter and record this value. Samples must be run within four hours of being run on the reference analyzer.
D. Calculate the percent difference between analyzers using the following formula:

$$\left(\frac{[\text{Reference Analyzer Mean} - \text{Comparison Analyzer Mean}]}{\text{Reference Analyzer Mean}}\right)*100$$

E. Evaluate the results. Compare the calculated mean percent difference for each parameter and ensure they are within the recommended limits

a. Expectations for XN-Series Analyzer-to-Analyzer Correlation (Closed to Closed or Open to Open)

WBC	+/- 7.5%	**MCV**	+/- 3.0%
RBC	+/- 3.0%	**PLT***	+/- 12.5%
HGB	+/- 3.5 %	**RET**	+/- 30%
HCT	+/- 3.0%		

*Platelet correlation limits apply to comparisons of results obtained using the same methodology (i.e., PLT-I to PLT-I, PLT-F to PLT-F).

VI. REFERENCES:

A. Analyzer-to Analyzer Correlation (Whole Blood Cross-Check Procedure). Product Notification: Document Number 62-1457. 04/2018. Sysmex America Inc., Lincolnshire, IL.

POLICY CREATION :		***Date***
Author:	***Kelly Hall, MLS (ASCP)***	***11/16/18***
Medical Director:	***Kathryn Kramer, MD***	***11/16/18***

MEDICAL DIRECTOR		
DATE	NAME	SIGNATURE
11-19-18	Kathryn O. Kramer MD	
SECTION MEDICAL DIRECTOR		

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

Reviewed by:

Lead	Date	Coordinator/ Manager	Date	Medical Director	Date
.1 [signature]	11-23-18				