

**PROFICIENCY TESTING
PERFORMANCE EVALUATION
2021 Hematology / Coagulation - 1st Event**

Please check the reports carefully. Errors made by API will be corrected if reported within 60 days of the final report date.

Customer Information	
<p>Dylan Eaton - Lab HealthPartners - Health Center for Women 2635 University Avenue West, Suite 160 Westgate III Building, Mailstop 36101A Saint Paul, MN 55114-1271</p>	<p>API Customer Number: 46316 CLIA Number: 24D0999602 These reports have also been prepared for: COLA (0016269) HealthPartners, Colleen Russell, Lab Administration</p> <p style="text-align: center;">-All acceptable.</p>

The American Proficiency Institute evaluation reports consist of four parts : Report Cover, Performance Summary, Comparative Evaluation, and Participant Data Summary. The Performance Summary and Comparative Evaluation are enclosed, and the Participant Data Summary is available on our website. Click on 'Participant Data Summaries' on the left side of the screen, choose a Test Event, and select an analyte and peer group to view the statistics.

Laboratories should review the Performance Summary and Comparative Evaluation thoroughly for failures or 'not graded' analytes. Laboratories are responsible for documenting and performing corrective action for failures and must perform a self-evaluation using statistics presented in the Participant Data Summary for samples that have not been graded.

PERFORMANCE REVIEW AND CORRECTIVE ACTION

After reviewing the evaluation reports, complete the information below and retain this form along with the enclosed reports for your records.

Reviewed by (Lab Director or designee): _____ Date: 5-1-2021

Corrective action taken (if indicated):

Performing staff reviewed: Jay Mellentin, Lee Daniels, Brittany Sauser

Performance Summary
2021 Hematology / Coagulation - 1st Event

This is a summary of your proficiency testing performance for the last three test events. It is divided into sections according to specialty/sub-specialty. Unsuccessful long-term performance, where indicated, is based on unsatisfactory scores for two of three test events.

The scores for individual analytes are defined as the ratio of acceptable responses to the number of samples tested, expressed as a percentage. Unsatisfactory performance (denoted by ✓) is indicated for any analyte with less than 80%. Analytes that are scored for CMS are designated by (**).

CHEMISTRY					
<i>Endocrinology</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
HCG, Urine (Urinalysis)	100%	100%	100%		

CHEMISTRY					
<i>Routine Chemistry</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
Glucose (WB - Waived Pkg)	100%	100%	100%		

HEMATOLOGY					
<i>Hematology</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
Blood Cell ID (Educational)	Educational	Educational	Educational		
Blood Cell Identification	100%	100%	100%		
Eosinophil (DIF)	Educational	Educational	Educational		
Erythrocyte Count **	100%	100%	100%		
Hematocrit **	100%	100%	100%		
Hemoglobin **	100%	100%	100%		
IG absolute (Hem - 5S)	100%	100%	100%		
IG percent (Hem - 5S)	100%	100%	100%		
Immature Cell (DIF)	Educational				
INR	80%	100%	100%		
Leukocyte Count **	100%	100%	100%		
Lymphocyte (DIF)	Educational	Educational	Educational		
MCH (Hem - 5S)	100%	100%	100%		
MCHC (Hem - 5S)	100%	100%	100%		
MCV (Hem - 5S)	100%	100%	100%		
Monocyte (DIF)	Educational	Educational	Educational		
Neutrophil, seg or band (DIF)	Educational	Educational	Educational		
NRBC/100 WBC (DIF)		Educational	Educational		
Platelet Count **	100%	100%	100%		
Platelet estimate (DIF)			100%		
Prothrombin Time **	100%	100%	100%		
RDW-CV (Hem - 5S)	100%	100%	100%		
Sedimentation Rate	100%	100%	100%		
White Blood Cell Differential **	100%	100%	100%		
Basophils (Hem - 5S)	100%	100%	100%		
Eosinophils (Hem - 5S)	100%	100%	100%		
Lymphocytes (Hem - 5S)	100%	100%	100%		
Monocytes (Hem - 5S)	100%	100%	100%		
Neutrophils (Hem - 5S)	100%	100%	100%		

MICROSCOPY					
<i>Microscopy</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
Urine Sediment	100%	100%	100%		
Vaginal Wet Preparation	100%	100%	100%		
Vaginal Wet Preparation (KOH)	100%	100%	100%		

URINALYSIS AND OTHER TESTS					
<i>Urinalysis and Other Tests</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
Bilirubin (Urinalysis)	100%	100%	100%		
Blood or Hgb (UA)	100%	100%	100%		
Fecal Occult Blood	100%	100%	100%		
Glucose (UA semi-quant)	100%	100%	100%		
Ketones (Urinalysis)	100%	100%	100%		
Leukocyte Esterase	100%	100%	100%		
Nitrite	100%	100%	100%		

URINALYSIS AND OTHER TESTS - continued					
<i>Urinalysis and Other Tests - continued</i>	2020 2nd	2020 3rd	2021 1st	Long Term	Notes (2021 1st)
pH (Urinalysis)	100%	100%	100%		
Protein (UA semi-quant)	100%	100%	100%		
Specific Gravity (semi-quant)	100%	100%	100%		
Urobilinogen	100%	100%	100%		

Comparative Evaluation
2021 Hematology / Coagulation - 1st Event

This report shows the result you reported, expected result, mean, SD (Standard Deviation), SDI (Standard Deviation Interval), and your grade for each sample tested. The SDI compares your laboratory's result to the comparison group's mean and is defined as follows:

$$SDI = \frac{\text{Reported Result} - \text{Comparison Group Mean}}{\text{Comparison Group Standard Deviation}}$$

Analytes that are scored for CMS are designated by (**). Analytes designated by (^) are not included in API's scope of ISO/IEC 17043 accreditation.

BLOOD CELL IDENTIFICATION				
Analyte / Method	Sample	Reported Result	Expected Result	Performance
Blood Cell Identification	BCI-01	Lymphocyte, normal	Lymphocyte, normal	Acceptable
	BCI-02	Monocyte	Monocyte	Acceptable
	BCI-03	Neutrophil, hyposegmented	Neutrophil, hyposegmented	Acceptable
	BCI-04	Eosinophil, all stages	Eosinophil, all stages	Acceptable
	BCI-05	Neutrophil, band (stab)	Neutrophil, band (stab)	Acceptable

COAGULATION								
Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Performance	
INR	COA-01	1.0	0.8 - 1.2	1.01	0.06	-0.2	Acceptable	
	Diagnostica Stago ST4 / Diag Stago	COA-02	3.4	2.6 - 4.2	3.41	0.24	0.0	Acceptable
	Neoplastine CI Plus (HCWLB STAGO STAR)	COA-03	1.1	0.9 - 1.3	1.11	0.06	-0.2	Acceptable
	COA-04	1.1	0.8 - 1.2	1.02	0.06	1.3	Acceptable	
	COA-05	6.0	4.3 - 7.2	5.74	0.47	0.6	Acceptable	
Prothrombin Time (sec) **	COA-01	12.7	11.0 - 15.0	12.97	0.39	-0.7	Acceptable	
	Diagnostica Stago ST4 / Diag Stago	COA-02	32.5	28.2 - 38.2	33.20	1.79	-0.4	Acceptable
	Neoplastine CI Plus (HCWLB STAGO STAR)	COA-03	14.0	11.7 - 16.0	13.84	0.36	0.4	Acceptable
	COA-04	13.2	11.0 - 15.0	12.98	0.39	0.6	Acceptable	
	COA-05	49.7	42.5 - 57.6	50.01	3.61	0.0	Acceptable	

EDUCATIONAL BLOOD CELL IDENTIFICATION							
Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Performance
Eosinophil (DIF) (%) ^	DIF-01	14	0 - 15	7.4	2.5	2.6	Not Graded ⁶
Lymphocyte (DIF) (%) ^	DIF-01	9	0 - 15	6.9	2.4	0.9	Not Graded ⁶
Monocyte (DIF) (%) ^	DIF-01	3	0 - 8	2.5	1.6	0.3	Not Graded ⁶
Neutrophil, seg or band (DIF) (%) ^	DIF-01	74	58 - 98	77.8	6.5	-0.6	Not Graded ⁶
NRBC/100 WBC (DIF) (%) ^	DIF-01	1	0 - 2	1.0	0.0		Not Graded ⁶
Blood Cell ID (Educational)	ECI-01	Dacryocyte (tear-drop cell)	Dacryocyte (tear-drop cell)				Not Graded ⁶
	ECI-02	Lymphocyte, normal	Lymphocyte, normal				Not Graded ⁶
	ECI-03	Platelet(s), normal	See commentary				Not Graded ⁶
	ECI-04	Neutrophil, band (stab)	Neutrophil, band (stab)				Not Graded ⁶
	ECI-05	Basophil, all stages	Basophil, all stages				Not Graded ⁶
	Platelet estimate (DIF) ^	DIF-01	Increased	Increased			

FECAL OCCULT BLOOD				
Analyte / Method	Sample	Reported Result	Expected Result	Performance
Fecal Occult Blood	FOB-01	Positive	Positive	Acceptable
B. Coulter Hemocult II, SENS A				

HEMATOLOGY - 5S							
Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Performance

HEMATOLOGY - 5S - continued

<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Mean</u>	<u>SD</u>	<u>SDI</u>	<u>Performance</u>
Basophils (Hem - 5S) (%) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	5.0	4.0 - 6.3	5.18	0.37	-0.5	Acceptable
	XE-02	5.0	4.0 - 6.5	5.25	0.40	-0.6	Acceptable
	XE-03	6.0	5.1 - 7.5	6.33	0.39	-0.8	Acceptable
	XE-04	6.0	4.6 - 6.8	5.71	0.35	0.8	Acceptable
	XE-05	6.0	4.6 - 6.8	5.70	0.36	0.8	Acceptable
Eosinophils (Hem - 5S) (%) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	10.0	7.0 - 11.7	9.34	0.78	0.8	Acceptable
	XE-02	10.0	7.1 - 11.6	9.36	0.74	0.9	Acceptable
	XE-03	12.0	8.9 - 14.0	11.43	0.83	0.7	Acceptable
	XE-04	9.0	8.0 - 12.7	10.36	0.77	-1.8	Acceptable
	XE-05	10.0	7.9 - 12.5	10.19	0.75	-0.3	Acceptable
Hematocrit (Hem - 5S) (%) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	54	50 - 58	54.0	0.8	0.0	Acceptable
	XE-02	17	15 - 18	16.8	0.5	0.4	Acceptable
	XE-03	46	42 - 48	45.1	0.7	1.3	Acceptable
	XE-04	18	16 - 19	17.7	0.5	0.6	Acceptable
	XE-05	38	35 - 40	37.5	0.6	0.8	Acceptable
Hemoglobin (Hem - 5S) (g/dL) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	18.6	17.1 - 19.8	18.47	0.13	1.0	Acceptable
	XE-02	5.7	5.2 - 6.0	5.60	0.06	1.7	Acceptable
	XE-03	15.8	14.5 - 16.8	15.64	0.12	1.3	Acceptable
	XE-04	6.1	5.6 - 6.5	6.05	0.06	0.8	Acceptable
	XE-05	13.0	12.0 - 13.9	12.95	0.10	0.5	Acceptable
IG absolute (Hem - 5S) (x 10E9/L) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	0.30	0.26 - 0.34	0.299	0.013	0.1	Acceptable
	XE-02	0.30	0.24 - 0.33	0.282	0.013	1.4	Acceptable
	XE-03	2.00	1.75 - 2.18	1.965	0.069	0.5	Acceptable
	XE-04	0.90	0.73 - 0.94	0.832	0.033	2.1	Acceptable
	XE-05	0.70	0.63 - 0.81	0.723	0.029	-0.8	Acceptable
IG percent (Hem - 5S) (%) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	9.3	8.8 - 11.2	9.97	0.39	-1.7	Acceptable
	XE-02	10.0	8.7 - 11.2	9.96	0.41	0.1	Acceptable
	XE-03	12.2	10.9 - 13.2	12.09	0.37	0.3	Acceptable
	XE-04	11.1	9.8 - 12.0	10.89	0.36	0.6	Acceptable
	XE-05	11.1	9.8 - 12.0	10.86	0.35	0.7	Acceptable
Lymphocytes (Hem - 5S) (%) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	37.0	31.8 - 39.3	35.53	1.23	1.2	Acceptable
	XE-02	33.0	31.1 - 38.3	34.71	1.19	-1.4	Acceptable
	XE-03	25.0	23.6 - 27.4	25.50	0.62	-0.8	Acceptable
	XE-04	32.0	29.0 - 33.2	31.10	0.68	1.3	Acceptable
	XE-05	31.0	29.9 - 34.4	32.15	0.75	-1.5	Acceptable
MCH (Hem - 5S) (pg) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	28.8	28.0 - 29.9	28.95	0.29	-0.5	Acceptable
	XE-02	25.7	24.2 - 26.1	25.18	0.30	1.7	Acceptable
	XE-03	30.8	29.8 - 32.0	30.91	0.34	-0.3	Acceptable
	XE-04	25.5	24.3 - 26.2	25.27	0.31	0.7	Acceptable
	XE-05	29.8	28.9 - 30.8	29.83	0.31	0.0	Acceptable
MCHC (Hem - 5S) (g/dL) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	34.3	32.9 - 35.6	34.25	0.42	0.1	Acceptable
	XE-02	34.3	32.1 - 35.2	33.63	0.50	1.3	Acceptable
	XE-03	34.6	33.2 - 36.3	34.71	0.50	-0.2	Acceptable
	XE-04	34.7	32.6 - 36.1	34.34	0.58	0.6	Acceptable
	XE-05	34.6	33.2 - 36.1	34.62	0.47	0.0	Acceptable
MCV (Hem - 5S) (fL) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	84.2	81.4 - 87.5	84.47	0.87	-0.3	Acceptable
	XE-02	74.8	71.8 - 77.9	74.81	0.79	0.0	Acceptable
	XE-03	88.9	86.0 - 92.1	89.01	0.97	-0.1	Acceptable
	XE-04	73.6	70.6 - 76.7	73.66	0.75	0.0	Acceptable
	XE-05	86.2	83.1 - 89.2	86.15	0.83	0.1	Acceptable
Monocytes (Hem - 5S) (%) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	12.0	9.2 - 14.7	11.93	0.91	0.1	Acceptable
	XE-02	13.0	9.8 - 15.1	12.45	0.86	0.6	Acceptable
	XE-03	11.0	9.1 - 12.2	10.69	0.50	0.6	Acceptable
	XE-04	11.0	9.3 - 12.6	10.96	0.54	0.1	Acceptable
	XE-05	11.0	8.6 - 12.1	10.37	0.57	1.1	Acceptable

Comparative Evaluation
2021 Hematology / Coagulation - 1st Event

HEMATOLOGY - 5S - continued							
<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Mean</u>	<u>SD</u>	<u>SDI</u>	<u>Performance</u>
Neutrophils (Hem - 5S) (%) ** Sysmex XN-450	XE-01	36.9	34.6 - 41.2	37.90	1.07	-0.9	Acceptable
	XE-02	38.7	34.8 - 41.5	38.13	1.11	0.5	Acceptable
	XE-03	45.4	43.5 - 48.6	46.03	0.84	-0.8	Acceptable
	XE-04	41.9	39.2 - 44.6	41.88	0.89	0.0	Acceptable
	XE-05	42.0	39.0 - 44.1	41.57	0.83	0.5	Acceptable
Platelet Count (Hem - 5S) (x 10E9/L) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	137	110 - 184	147.0	7.5	-1.3	Acceptable
	XE-02	55	42 - 72	57.1	3.6	-0.6	Acceptable
	XE-03	516	388 - 648	517.8	11.8	-0.2	Acceptable
	XE-04	336	260 - 434	347.2	8.0	-1.4	Acceptable
	XE-05	219	174 - 292	233.2	8.2	-1.7	Acceptable
RDW-CV (Hem - 5S) (%) Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	14.7	13.1 - 16.9	15.04	0.62	-0.5	Acceptable
	XE-02	19.6	19.0 - 20.1	19.54	0.16	0.4	Acceptable
	XE-03	14.1	13.7 - 14.6	14.13	0.13	-0.2	Acceptable
	XE-04	17.3	17.0 - 18.0	17.49	0.14	-1.4	Acceptable
	XE-05	14.5	14.2 - 15.0	14.61	0.13	-0.8	Acceptable
Red Cell Count (Hem - 5S) (x 10E12/L) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	6.45	6.00 - 6.77	6.384	0.064	1.0	Acceptable
	XE-02	2.22	2.08 - 2.36	2.223	0.023	-0.1	Acceptable
	XE-03	5.13	4.76 - 5.37	5.066	0.052	1.2	Acceptable
	XE-04	2.39	2.24 - 2.54	2.393	0.026	-0.1	Acceptable
	XE-05	4.36	4.08 - 4.61	4.347	0.042	0.3	Acceptable
White Cell Count (Hem - 5S) (x 10E9/L) ** Sysmex XN-450 (HCWLB SYSMEXWA)	XE-01	3.0	2.5 - 3.5	3.00	0.08	0.0	Acceptable
	XE-02	2.8	2.3 - 3.3	2.82	0.08	-0.3	Acceptable
	XE-03	16.4	13.8 - 18.8	16.29	0.29	0.4	Acceptable
	XE-04	7.7	6.4 - 8.8	7.64	0.15	0.4	Acceptable
	XE-05	6.7	5.6 - 7.7	6.67	0.16	0.2	Acceptable

MICROSCOPY / URINE SEDIMENT				
<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Performance</u>
Urine Sediment	US-01	Yeast	Yeast	Acceptable
	US-02	Calcium oxalate crystal(s)	Calcium oxalate crystal(s)	Acceptable
Vaginal Wet Preparation	VA-01	No yeast, Trich. or clue cells	No yeast, Trich. or clue cells	Acceptable
Vaginal Wet Preparation (KOH)	VKP-01	Yeast seen	Yeast seen	Acceptable

SEDIMENTATION RATE - A							
<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Mean</u>	<u>SD</u>	<u>SDI</u>	<u>Performance</u>
Sedimentation Rate (mm/hr) Streck ESR 10	ESR-01	> 68	64 - 87	75.3	5.4		Acceptable
	ESR-02	50	45 - 72	58.1	6.5	-1.2	Acceptable

URINALYSIS & HCG				
<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Performance</u>
Bilirubin (Urinalysis) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	Moderate (2+)	Small (1+)	Acceptable
			Moderate (2+)	
			Large (3-4+)	
Blood or Hgb (UA) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	Large (250 Ery/uL, 3-5+)	Large (250 Ery/uL, 3-5+)	Acceptable
			Moderate (50-150 Ery/uL, 2+)	
Glucose (UA semi-quant) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	150 - 250 mg/dL	>500 or >=1000 or >=2000 mg/dL	Acceptable
			300-500 mg/dL	
			150 - 250 mg/dL	
			30-100 mg/dL	

URINALYSIS & HCG - continued

<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Performance</u>
HCG, Urine (Urinalysis) Card Health SP Brand hCG Combo	UA-01	Positive	Positive	Acceptable
Ketones (Urinalysis) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	Moderate (2+, 40-60 mg/dL)	Large (3+, >=80 mg/dL) Moderate (2+, 40-60 mg/dL) Small (1+, 15-25 mg/dL)	Acceptable
Leukocyte Esterase Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	Moderate (2+)	Trace Small (1+) Moderate (2+) Large (3+)	Acceptable
Nitrite Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	Positive	Positive	Acceptable
pH (Urinalysis) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	7.0	6.5 7.0 7.5	Acceptable
Protein (UA semi-quant) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	75 - 200 mg/dL	300-500 or >300 mg/dL 75 - 200 mg/dL 25 - 30 mg/dL	Acceptable
Specific Gravity (semi-quant) Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	1.020 - 1.025	>=1.030 1.020 - 1.025	Acceptable
Urobilinogen Siemens Clinitek Advantus / Siemens Reagent strips (all)	UA-01	2.0/3.0 mg/dL	2.0/3.0 mg/dL 4.0 or 4.0/6.0 mg/dL	Acceptable

WHOLE BLOOD GLUCOSE (WAIVED PACKAGE)

<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Mean</u>	<u>SD</u>	<u>SDI</u>	<u>Performance</u>
Glucose (WB - Waived Pkg) (mg/dL)	GLU-01	215	172 - 259	215.5	5.8	0.0	Acceptable
Accu-Chek Inform II strips (RALS ACCU CHECK)	GLU-02	62	51 - 77	63.8	1.7	-1.1	Acceptable

6 - Educational Sample