



PROFICIENCY TESTING PERFORMANCE EVALUATION

2018 Chemistry - Core - 1st Event

Please check the reports carefully and notify API within 30 days of any corrections that must be made to your evaluation.

Customer Information

Heather Hall - Laboratory
Brown Clinic
506 1st Avenue NE
Watertown, SD 57201

API Customer Number: 28618 CLIA Number: 43D0407296
These reports have also been prepared for:
COLA (0016466)

The American Proficiency Institute evaluation reports consist of three parts: 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 return this form along with the enclosed reports for your records.

Reviewed by (Lab Director or designee): Ann Reis, MD Date: 3/2/18

Corrective action taken (if indicated):

100% Success on Survey

No ungraded or educational samples

Chatterman 3/2/18



1159 Business Park Drive, Traverse City, MI 49686

Performance Summary

2018 Chemistry - Core - 1st Event

Customer No: 26618
 CLIA No: 43D0407298
 Address: Heather Hall - Laboratory
 Brown Clinic
 506 1st Avenue NE
 Watertown, SD 57201

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>	2017 2nd	2017 3rd	2018 1st	Long Term	Notes (2018 1st)
Free Thyroxine **	100%	100%	100%		
HCG **	100%	100%	100%		
Thyroid Stimulating Hormone **	100%	100%	100%		

CHEMISTRY					
<i>Routine Chemistry</i>	2017 2nd	2017 3rd	2018 1st	Long Term	Notes (2018 1st)
Albumin **	100%	100%	100%		
Alkaline Phosphatase **	100%	100%	100%		
ALT / SGPT **	100%	100%	100%		
AST / SGOT **	100%	100%	100%		
Bilirubin, Direct	100%	100%	100%		
Bilirubin, Total **	100%	100%	100%		
BNP (CM)	100%	100%	100%		
Calcium, Total **	100%	100%	100%		
Chloride **	100%	100%	100%		
Cholesterol, HDL **	100%	100%	100%		
Cholesterol, Total **	100%	100%	100%		
CO2	100%	100%	100%		
Creatine Kinase / CK **	100%	100%	100%		
Creatine Kinase, Isoenzyme **	100%	100%	100%		
Creatinine **	100%	100%	100%		
Glucose **	100%	100%	100%		
Glycated Hemoglobin	100%	100%	100%		
Iron, Total **	100%	100%	100%		
Magnesium **	100%	100%	100%		
Phosphorus	100%	100%	100%		
Potassium **	100%	100%	100%		
Sodium **	100%	100%	100%		
TIBC, measured	100%	100%	80%		
Total Protein **	100%	100%	100%		
Triglycerides **	100%	100%	100%		
Troponin I (CM)	100%	100%	100%		
Urea Nitrogen **	100%	100%	100%		
Uric Acid **	100%	100%	100%		

CHEMISTRY					
<i>Toxicology</i>	2017 2nd	2017 3rd	2018 1st	Long Term	Notes (2018 1st)
Digoxin **	100%	100%	100%		



1159 Business Park Drive, Traveras City, MI 49886

Comparative Evaluation
2018 Chemistry - Core - 1st Event

Customer No: 26618 Kit No: 1
 CLIA No: 43D0407296
 Address: Heather Hall - Laboratory
 Brown Clinic
 506 1st Avenue NE
 Watertown, SD 57201

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 (**).

CARDIAC MARKERS

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
BNP (CM) (pg/mL) AlereBiositeTriage BNP Test	CM-01	57.6	32.9 - 80.3	56.58	7.88	0.1	Acceptable
	CM-02	1,250.0	782.6 - 1,941.8	1,362.17	193.18	-0.6	Acceptable
	CM-03	726.0	415.0 - 1,012.8	713.94	99.62	0.1	Acceptable
	CM-04	316.0	222.0 - 526.4	374.18	50.72	-1.1	Acceptable
	CM-05	2,200.0	1,350.0 - 3,638.4	2,494.17	381.39	-0.8	Acceptable
CK-MB (ng/mL) ** AlereBiositeTriageCardiac-EDTA	CM-01	2.0	0.0 - 5.0	1.94	0.47	0.1	Acceptable
	CM-02	20.1	9.0 - 28.7	18.86	3.26	0.4	Acceptable
	CM-03	9.9	4.8 - 16.0	10.41	1.85	-0.3	Acceptable
	CM-04	5.6	2.6 - 9.3	5.95	1.11	-0.3	Acceptable
	CM-05	28.4	16.4 - 52.4	34.42	5.98	-1.0	Acceptable
Troponin I (CM) (ng/mL) AlereBiositeTriageCardiac-EDTA	CM-01	< 0.05	0.00 - 0.35	0.050	0.001		Acceptable
	CM-02	4.79	1.31 - 6.01	3.656	0.782	1.5	Acceptable
	CM-03	1.54	0.38 - 1.96	1.167	0.261	1.4	Acceptable
	CM-04	0.39	0.09 - 0.70	0.397	0.099	0.0	Acceptable
	CM-05	8.63	4.41 - 13.90	9.155	1.580	-0.3	Acceptable

CHEMISTRY

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Albumin (g/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	5.7	5.1 - 6.4	5.77	0.12	-0.6	Acceptable
	CH-02	1.6	1.4 - 1.9	1.64	0.06	-0.7	Acceptable
	CH-03	3.4	3.0 - 3.8	3.42	0.08	-0.3	Acceptable
	CH-04	2.3	2.1 - 2.7	2.37	0.06	-1.2	Acceptable
	CH-05	2.6	2.4 - 3.0	2.72	0.07	-1.7	Acceptable
Alkaline Phosphatase (U/L) ** Siemens Dimension / S Dimension ALPI (DF150)	CH-01	99	68 - 127	97.2	3.3	0.5	Acceptable
	CH-02	42	27 - 52	39.4	2.6	1.0	Acceptable
	CH-03	355	250 - 465	357.2	10.7	-0.2	Acceptable
	CH-04	175	121 - 227	173.9	6.0	0.2	Acceptable
	CH-05	241	165 - 308	236.6	8.1	0.5	Acceptable
ALT / SGPT (U/L) ** Siemens Dimension / S Dimension ALTI-new (DF143)	CH-01	32	26 - 41	33.7	2.3	-0.7	Acceptable
	CH-02	18	14 - 23	18.7	1.8	-0.4	Acceptable
	CH-03	273	216 - 326	271.2	6.1	0.3	Acceptable
	CH-04	122	96 - 146	121.1	3.1	0.3	Acceptable
	CH-05	172	137 - 206	171.6	4.0	0.1	Acceptable
AST / SGOT (U/L) ** Siemens Dimension / Siemens Dimension reagent	CH-01	34	25 - 39	32.0	1.9	1.1	Acceptable
	CH-02	106	84 - 127	105.1	3.0	0.3	Acceptable
	CH-03	302	239 - 360	299.5	7.2	0.3	Acceptable
	CH-04	185	147 - 221	183.8	4.9	0.2	Acceptable
	CH-05	223	178 - 268	222.9	5.9	0.0	Acceptable
Bilirubin, Direct (mg/dL) Siemens Dimension / Siemens Dimension reagent	CH-01	0.1	0.0 - 0.5	0.10	0.00		Acceptable
	CH-02	0.1	0.0 - 0.5	0.10	0.00		Acceptable
	CH-03	0.9	0.5 - 1.4	0.93	0.10	-0.3	Acceptable
	CH-04	0.5	0.0 - 0.9	0.44	0.06	1.0	Acceptable
	CH-05	0.7	0.2 - 1.1	0.61	0.08	1.1	Acceptable

CHEMISTRY - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Bilirubin, Total (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	0.5	0.0 - 0.9	0.44	0.05	1.2	Acceptable
	CH-02	0.4	0.0 - 0.9	0.41	0.06	-0.2	Acceptable
	CH-03	3.1	2.5 - 3.9	3.18	0.28	-0.3	Acceptable
	CH-04	1.5	1.0 - 1.9	1.46	0.14	0.3	Acceptable
	CH-05	2.1	1.6 - 2.5	2.07	0.19	0.2	Acceptable
Calcium, Total (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	6.8	5.9 - 8.0	6.98	0.19	-0.9	Acceptable
	CH-02	6.8	5.9 - 8.0	6.95	0.19	-0.8	Acceptable
	CH-03	13.2	12.5 - 14.5	13.50	0.30	-1.0	Acceptable
	CH-04	9.2	8.5 - 10.6	9.52	0.22	-1.5	Acceptable
	CH-05	10.3	9.8 - 11.9	10.81	0.24	-2.1	Acceptable
Chloride (mmol/L) ** Siemens Dimensen QuikLYTE- EXL	CH-01	84	78 - 88	82.9	1.0	1.1	Acceptable
	CH-02	83	77 - 86	81.9	1.0	1.1	Acceptable
	CH-03	123	115 - 129	122.0	1.6	0.6	Acceptable
	CH-04	98	93 - 104	98.1	1.1	0.0	Acceptable
	CH-05	106	100 - 112	105.9	1.2	0.1	Acceptable
Cholesterol, HDL (mg/dL) ** Siemens Dimension / Siemens Dimension AHDH DF48B	CH-01	63	44 - 84	64.1	2.1	-0.5	Acceptable
	CH-02	29	20 - 39	29.4	1.1	-0.4	Acceptable
	CH-03	131	93 - 174	133.6	5.4	-0.5	Acceptable
	CH-04	71	50 - 94	71.9	2.8	-0.3	Acceptable
	CH-05	90	64 - 121	92.4	3.6	-0.7	Acceptable
Cholesterol, Total (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	235	217 - 266	241.3	5.6	-1.1	Acceptable
	CH-02	56	52 - 64	58.0	2.9	-0.7	Acceptable
	CH-03	240	222 - 273	247.7	5.5	-1.4	Acceptable
	CH-04	128	120 - 148	133.9	3.6	-1.6	Acceptable
	CH-05	166	154 - 189	171.7	4.2	-1.4	Acceptable
CO2 (mmol/L) Siemens Dimension enzymatic	CH-01	15	9 - 20	14.9	1.7	0.1	Acceptable
	CH-02	14	10 - 19	14.2	1.4	-0.1	Acceptable
	CH-03	41	32 - 48	40.1	2.5	0.4	Acceptable
	CH-04	26	19 - 31	25.1	1.8	0.5	Acceptable
	CH-05	31	24 - 36	30.2	1.9	0.4	Acceptable
Creatine Kinase / CK (U/L) ** Siemens Dimension / Siemens Dimension CKI (DF38)	CH-01	169	115 - 215	165.3	3.7	1.0	Acceptable
	CH-02	22	14 - 27	20.1	1.8	1.1	Acceptable
	CH-03	320	216 - 403	309.5	17.9	0.6	Acceptable
	CH-04	151	101 - 188	144.4	5.8	1.1	Acceptable
	CH-05	210	141 - 263	201.6	9.2	0.9	Acceptable
Creatinine (mg/dL) ** Siemens Dimension / Siemens Dimension CRE2	CH-01	0.58	0.24 - 0.84	0.540	0.041	1.0	Acceptable
	CH-02	0.46	0.14 - 0.75	0.444	0.041	0.4	Acceptable
	CH-03	5.17	4.44 - 6.02	5.234	0.120	-0.5	Acceptable
	CH-04	2.38	2.02 - 2.75	2.386	0.065	0.0	Acceptable
	CH-05	3.34	2.84 - 3.86	3.352	0.080	-0.2	Acceptable
Glucose (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	61	55 - 69	61.9	1.6	-0.6	Acceptable
	CH-02	52	46 - 59	52.3	1.5	-0.2	Acceptable
	CH-03	248	224 - 275	249.9	4.8	-0.4	Acceptable
	CH-04	130	118 - 145	131.8	2.6	-0.7	Acceptable
	CH-05	168	153 - 189	171.1	3.3	-0.9	Acceptable
Iron, Total (ug/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	148	119 - 180	149.6	2.3	-0.7	Acceptable
	CH-02	32	25 - 39	32.0	1.4	0.0	Acceptable
	CH-03	210	168 - 253	210.7	2.9	-0.2	Acceptable
	CH-04	102	83 - 125	103.8	1.8	-1.0	Acceptable
	CH-05	138	111 - 168	139.3	2.2	-0.6	Acceptable
Magnesium (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	1.3	0.9 - 1.7	1.29	0.07	0.1	Acceptable
	CH-02	1.0	0.7 - 1.2	0.95	0.07	0.7	Acceptable
	CH-03	4.5	3.3 - 5.5	4.40	0.11	0.9	Acceptable
	CH-04	2.4	1.7 - 3.0	2.34	0.08	0.8	Acceptable
	CH-05	3.0	2.2 - 3.8	3.02	0.09	-0.2	Acceptable

Comparative Evaluation
2018 Chemistry - Core - 1st Event

CHEMISTRY - 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>Grade</u>
Phosphorus (mg/dL) Siemens Dimension / S Dimension new PHOS DF61A	CH-01	2.2	2.0 - 2.5	2.26	0.12	-0.5	Acceptable
	CH-02	1.6	1.5 - 1.9	1.71	0.09	-1.2	Acceptable
	CH-03	6.1	5.8 - 6.6	6.18	0.19	-0.4	Acceptable
	CH-04	3.5	3.2 - 3.8	3.54	0.13	-0.3	Acceptable
	CH-05	4.3	4.1 - 4.7	4.42	0.14	-0.9	Acceptable
Potassium (mmol/L) ** Siemens Dimensn QuikLYTE- EXL	CH-01	2.4	1.9 - 3.0	2.42	0.04	-0.5	Acceptable
	CH-02	2.3	1.8 - 2.9	2.38	0.04	-2.0	Acceptable
	CH-03	6.6	6.0 - 7.1	6.56	0.07	0.6	Acceptable
	CH-04	4.0	3.5 - 4.6	4.04	0.05	-0.8	Acceptable
	CH-05	4.9	4.3 - 5.4	4.88	0.06	0.3	Acceptable
Sodium (mmol/L) ** Siemens Dimensn QuikLYTE- EXL	CH-01	127	123 - 132	127.9	1.4	-0.6	Acceptable
	CH-02	118	113 - 122	117.9	1.2	0.1	Acceptable
	CH-03	162	156 - 165	160.5	1.5	1.0	Acceptable
	CH-04	134	130 - 139	134.8	1.3	-0.6	Acceptable
	CH-05	143	139 - 148	143.2	1.4	-0.1	Acceptable
TIBC, measured (ug/dL) Siemens Dimension / Siemens Dimension IBCT DF84	CH-01	497	464 - 514	489.2	12.2	0.6	Acceptable
	CH-02	98	59 - 96	77.8	9.1	2.2	Unacceptable
	CH-03	404	371 - 412	391.5	9.9	1.3	Acceptable
	CH-04	217	184 - 221	202.3	9.0	1.6	Acceptable
	CH-05	281	247 - 283	265.2	8.9	1.8	Acceptable
Total Protein (g/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	10.0	9.1 - 11.2	10.12	0.17	-0.7	Acceptable
	CH-02	2.6	2.4 - 3.0	2.67	0.08	-0.9	Acceptable
	CH-03	8.6	7.8 - 9.6	8.71	0.15	-0.7	Acceptable
	CH-04	5.0	4.5 - 5.7	5.11	0.10	-1.1	Acceptable
	CH-05	6.2	5.6 - 7.0	6.30	0.11	-0.9	Acceptable
Triglycerides (mg/dL) ** Siemens Dimension / Siemens Dimension TGL	CH-01	138	100 - 167	133.5	2.7	1.7	Acceptable
	CH-02	94	66 - 111	88.5	2.3	2.4	Acceptable
	CH-03	251	180 - 301	240.8	4.9	2.1	Acceptable
	CH-04	155	112 - 189	150.5	3.3	1.4	Acceptable
	CH-05	182	135 - 227	180.9	3.8	0.3	Acceptable
Urea Nitrogen / BUN (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	6	4 - 9	6.5	0.8	-0.6	Acceptable
	CH-02	6	4 - 9	6.1	0.8	-0.1	Acceptable
	CH-03	45	40 - 49	44.9	1.4	0.1	Acceptable
	CH-04	21	19 - 24	21.6	0.9	-0.7	Acceptable
	CH-05	29	26 - 33	29.4	1.1	-0.4	Acceptable
Uric Acid (mg/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	1.9	1.5 - 2.2	1.87	0.11	0.3	Acceptable
	CH-02	1.7	1.4 - 2.1	1.77	0.09	-0.8	Acceptable
	CH-03	10.8	9.0 - 12.8	10.91	0.34	-0.3	Acceptable
	CH-04	5.4	4.5 - 6.4	5.43	0.14	-0.2	Acceptable
	CH-05	7.1	6.0 - 8.5	7.26	0.17	-0.9	Acceptable

CHEMISTRY (ENDOCRINOLOGY)

<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>Grade</u>
Free Thyroxine (ng/dL) ** Siemens Dimension EXL / Siemens Dimension EXL LOC1	CH-01	1.1	0.9 - 1.3	1.10	0.05	0.0	Acceptable
	CH-02	5.0	4.4 - 6.4	5.41	0.32	-1.3	Acceptable
	CH-03	4.3	3.6 - 5.1	4.35	0.22	-0.2	Acceptable
	CH-04	4.5	4.0 - 5.4	4.69	0.22	-0.9	Acceptable
	CH-05	4.3	3.8 - 5.2	4.48	0.22	-0.8	Acceptable

CHEMISTRY (ENDOCRINOLOGY) - 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>Grade</u>
Thyroid Stimulating Hormone (uU/mL) **	CH-01	2.69	2.22 - 2.95	2.581	0.120	0.9	Acceptable
Siemens Dimension EXL / Siemens	CH-02	0.54	0.43 - 0.61	0.517	0.028	0.8	Acceptable
Dimension EXL LOCI	CH-03	7.84	6.41 - 8.48	7.448	0.343	1.1	Acceptable
	CH-04	3.73	3.05 - 4.09	3.571	0.171	0.9	Acceptable
	CH-05	5.21	4.24 - 5.65	4.945	0.232	1.1	Acceptable

CHEMISTRY (TDM)

<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>Grade</u>
Digoxin (ng/mL) **	CH-01	0.5	0.2 - 0.7	0.47	0.07	0.4	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	0.7	0.5 - 1.0	0.71	0.07	-0.1	Acceptable
reagent	CH-03	2.8	2.2 - 3.5	2.85	0.13	-0.4	Acceptable
	CH-04	1.6	1.2 - 2.0	1.59	0.08	0.1	Acceptable
	CH-05	2.1	1.6 - 2.5	2.02	0.09	0.9	Acceptable

GLYCOHEMOGLOBIN

<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>Grade</u>
Glycated Hemoglobin (%)	GLY-01	11.8	9.5 - 14.3	11.91	0.33	-0.3	Acceptable
Siemens Dimension / Siemens Dimension	GLY-02	5.7	4.5 - 6.9	5.67	0.22	0.1	Acceptable
(HB1C)							

SERUM HCG

<u>Analyte / Method</u>	<u>Sample</u>	<u>Reported Result</u>	<u>Expected Result</u>	<u>Grade</u>
HCG (serum-qual) **	HCG-01	Negative	Negative	Acceptable
Quidel QuickVue OS HCG Combo	HCG-02	Positive	Positive	Acceptable
	HCG-03	Positive	Positive	Acceptable
	HCG-04	Positive	Positive	Acceptable
	HCG-05	Negative	Negative	Acceptable