

New Chemistry Platforms



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On 5/2/2018 the clinical chemistry laboratory will move Alpha-1-antitrypsin; C3 and C4 complement; Haptoglobin; Immunoglobulin A, G, and M; Pre-albumin; Rheumatoid Factor; Transferrin; CSF IgG and Albumin testing from the Beckmann Immage® 800 immunoassay platform and Free Kappa and Lambda Light Chain testing from the Binding Site Spa® Plus immunoassay platform all on to the Binding Site Optilite® immunoassay platform. In addition, High-Sensitivity C-reactive Protein and Urine Albumin testing will be moving from the Beckmann Immage® 800 immunoassay platform to the Ortho Clinical Diagnostics Vitros® 5600 immunoassay platform. These test transitions are part of our automation improvement and platform consolidation effort.

Correlation studies between the old and new assays are good for all of the tests. Of note, the Optilite® displayed a constant -20% bias vs the current Immage® 800 system for Rheumatoid Factor. However this bias is reflected and accounted for by the reference range of rheumatoid factor decreasing from < 20 IU/mL to <12.5 IU/mL. The remaining assays have had slight modifications to their reference ranges to be in-line with the manufacturer's ranges, which we verified in house. Of note for Urine Albumin, the reference range has been updated to use the current Kidney Disease: Improving Global Outcomes (KDIGO) definitions for albuminuria. The order codes for the tests have also changed. Please see the table on the following page for the outlined ordering process and reference range changes. Sample type will not change, collect an SST tube and submit serum. The test name in the table links to the test in the test catalog.

If you have any questions concerning these changes please contact Dr. Clayton Wilburn in the Chemistry Laboratory.

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WEBSITE

<http://UVMlabs.TestCatalog.org/>

Chemistry Platform Changes Continued

Test Name	Current Order	New Order	Current Reference Range	New Reference Range
Alpha-1-antitrypsin	AAT	AATS	88 – 174 mg/dL	>18 years: 90 – 200 mg/dL
C3 Complement	C3C	C3CS	79 – 152 mg/dL	>18 years: 81 – 157 mg/dL
C4 Complement	C4C	C4CS	16 – 38 mg/dL	>18 years: 13 – 39 mg/dL
Haptoglobin	HAPT	HAPTS	36 – 195 mg/dL	>18 years: 32 – 197 mg/dL
Immunoglobulin A	IGA	IGAS	82 – 453 mg/dL	>19 years: 85 – 499 mg/dL
Immunoglobulin G	IGG	IGGS	– 1560 mg/dL	>18 years: 610 – 1616 mg/dL
Immunoglobulin M	IGM	IGMS	46 – 304 mg/dL	>18 years: 35 – 242 mg/dL
Pre-albumin	PALB	PALBS	18 – 38 mg/dL	>18 years: 20 – 40 mg/dL
Rheumatoid Factor	RF	RFS	<20 IU/mL	<12.5 IU/mL
Transferrin	TRF	TRFS	202 – 336 mg/dL	>18 years: 201 – 352 mg/dL
CSF IgG	CIGG	CIGG	0.48 – 5.86 mg/dL	0 -5.5 mg/dL
CSF Albumin	CSALB	CSALB	13.9-24.6 mg/dL	≤25.1 mg/dL
CSF IgG Index	IGGIN	IGGIN	≤0.84	≤0.84
CSF IgG Synthesis Rate	IGGIN	IGGIN	≤ 8 mg/24hrs	≤ 8 mg/24hrs
CSF IgG/Albumin Ratio	IGGIN	IGGIN	≤0.24	≤0.24
High-Sensitivity CRP	SCRCP	CRPS	Low risk: < 1.0 mg/L Average Risk: 1.0-3.0 mg/L High Risk: > 3.0 mg/L Acute Inflammation: >10.0 mg/L	Low Risk: < 1.0 mg/L Average Risk: 1.0-3.0 mg/L High Risk: > 3.0 mg/L Indeterminate*: >10.0 mg/L *May be an indication of another source of inflammation or infection
Free Kappa	SERFLC	SERFLC	0.33 – 1.94 mg/dL	0.33 – 1.94 mg/dL
Free Lambda	SERFLC	SERFLC	0.57 – 2.63 mg/dL	0.57 – 2.63 mg/dL
Kappa/Lambda Ratio	SERFLC	SERFLC	0.26 – 1.65	0.26 – 1.65
Urine Albumin	UMALB	UMALBU	Normal = < 30 ug/mg creatinine High albuminuria = 30-300 ug/mg creatinine # Very high albuminuria = >300 ug/mg creatinine #	Normal: <30 ug/mg creatinine Moderately Increased Albuminuria: 30–300 ug/mg creatinine Severely Increased Albuminuria: >300 ug/mg creatinine