



## *Technical Memorandum*

**TO:** Physicians, Staff

**From:** Wesley Kim, MD, Medical Director  
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**Date:** December 17, 2009

**Subject:** Laboratory Automation System, Phase II

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Diagnostic Laboratory Services is pleased to announce that the second phase of new instrumentation validation is complete and implementation will take place on December 23, 2009. This phase involves transferring the remaining basic chemistry tests over to the new system. Again, it is our expectation that this change will further enhance the quality and reliability of our laboratory testing results.

Similar to the first memo, a list of tests that will be changed over in this phase, including the current reference ranges and the new reference ranges, are attached.

The final phase will occur last week of December, or first week of January 2010, and again our clients will be notified with the details prior to implementation.

If you have any questions or concerns, please contact DLS Client Services at 589-5101, or Dr. Wesley J. Kim at 589-5131.

Reference Ranges for Chemistry instrumentation, effective December 23, 2009

TEST	UNITS	CURRENT REFERENCE RANGE	NEW REFERENCE RANGE
α 1-Antitrypsin	mg/dL	83 – 167	90 - 200
ASO	IU/mL	< 125 = Negative 125-250 = Weak Pos 250-900 = Strong Pos	Adult: < 200 Child: < 150
C3	mg/dL	94 – 200	90 - 180
C4	mg/dL	15 - 50	10 - 40
CRP	mg/L	0.0 – 10.0	0.0-10.0
hsCRP	mg/L	<1.0 = Low Risk 1.0– 3.0 = Average Risk > 3.0 = High Risk	<1.0 = Low Risk 1.0– 3.0 = Average Risk > 3.0 = High Risk
Haptoglobin	mg/dL	30 - 195	30 - 200
IgA	mg/dL	58 – 335 1M: 8-45 4M: 10-87 8M: 10-107 11M: 10-130 3Y: 20-193 6Y: 54-318 9Y: 47-274 17Y: 44-416	70 – 400 0-1Y: 0-83 1-3Y: 20-100 4-6Y: 27-195 7-9Y: 34-305 10-11Y: 53-204 12-13Y: 58-358 14-15Y: 47-249 16-19Y: 61-348
IgG	mg/dL	780 – 1656 1M: 436-1264 4M: 165-683 8M: 204-912 11M: 305-1161 3Y: 399-1166 6Y: 551-1275 9Y: 601-1478 17Y: 710-1574	700 – 1600 0-1Y: 232-1411 1-3Y: 453-916 4-6Y: 504-1464 7-9Y: 572-1474 10-11Y: 698-1560 12-13Y: 759-1549 14-15Y: 716-1711 16-19Y: 549-1584
IgM	mg/dL	57 – 341 1M: 8-58 4M: 19-111 8M: 29-128 11M: 36-176 3Y: 41-198 6Y: 46-201 9Y: 49-221 17Y: 56-330	40 – 230 0-1Y: 0-145 1-3Y: 19-146 4-6Y: 24-210 7-9Y: 31-208 10-11Y: 31-179 12-13Y: 35-239 14-15Y: 15-188 16-19Y: 23-259
Phenytoin/Dilantin	ug/mL	10 - 20	10 – 20 Child: 6.0 – 14.0
Prealbumin	mg/dL	18 - 45	20 - 40
Rhumatoid Factor	IU/mL	<20 = Negative 20-30 = Borderline 30-80 = Weak Pos 80-560 = Strong Pos	<14
Transferrin	mg/dL	204 - 360	200 - 360
Urine Amylase	U/24 hours	59 - 401	40-330
Urine Calcium	mg/24 hours	50 - 400	100 - 300
Urine Creatinine	g/24 hours	M: 1.0 – 2.0 F: 0.8 – 1.8	M: 1.0-2.0 F: 0.7-1.6
Urine Magnesium	mg/24 hours	40 - 190	60 - 210
Urine Microalbumin	mg/24 hours mg/g Creatinine	<30 <30	<30 <30
Urine Phosphorus	mg/24 hours	400 - 1000	400 - 1300
Urine Protein	mg/24 hours	0 - 165	< 150
Urine Urea Nitrogen	g/24 hours	6 - 17	12-20
Urine Uric Acid	mg/24 hours	250 - 750	200 - 1000

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