

November 25, 2010

Dear Colleague:

This client letter contains many changes to our reference ranges in the area of chemistry analytes, along with minor changes to some specimen requirements and test information. Please take note. These changes become necessary as platform changes are made and we continue to improve our analytical sensitivity. We are very aware of the inconvenience when reference ranges are changed and we make every effort to keep them to a minimum. However, please realize that they facilitate our goal of providing quality results that reflect the highest degree of accuracy currently possible.

Specialty recently introduced a new 24hr urine panel for test code 4266U-Collagen Cross-Linked N-Telopeptide (NTX). As required for all 24hr panels, the 24 hr urine volume is essential for the calculation of the final results. Please provide this information upon order entry to ensure that TAT is not compromised due to the missing information. If the 24hr urine volume is not available please order test code 4266UR- Collagen Cross Linked N-Telopeptide (NTX) which is the code for the random urine.

We would also provide a reminder that coagulation testing requires special attention for accurate and reliable results. When sending samples for coagulation studies, please be sure to provide platelet-poor plasma by spinning the specimen twice. After the first spin, draw off the plasma into another tube and spin a second time, to assure a platelet concentration of $<10 \times 10^9/L$. Remember, the only anticoagulant acceptable for coagulation studies is Sodium Citrate. The presence of $>10,000$ platelets may cause the neutralization of heparin, if present in plasma. (Specimens with high platelet counts, upon freezing, release PF4, which is a powerful neutralizer of heparin and will result in inaccurate heparin monitoring by the APTT test.) For your convenience, we have attached a copy of our protocol for obtaining platelet-poor plasma. For a full description of specimen preparation for coagulation studies, please refer to the Specialty Labs Web site.

We thank you for choosing *Specialty* and look forward to your continued support. For additional information, please visit our Web site at www.specialtylabs.com or contact Client Relations at 800-421-4449.

Respectfully Yours,



Basel Kashlan, MD, FCAP
Laboratory Director

New Tests (*Specialty*):

4178U Oxymorphone, Quant, Urine

(Available Immediately)

<u>Component</u>	<u>Method</u>	<u>Cut-off/Units</u>
Oxymorphone	LC-MS-MS	50 ng/mL
Specimen/Stability	Urine 5.0 (3.0) mL: Ambient 7 days, Refrigerated 14 days, Frozen 30 days	
Collection Instructions	Collect 5 mL random urine.	
Schedule	Tuesday, Thursday, Saturday	
Report	Next day	
CPT Code	83925	
Regulatory Status	Laboratory Developed Test	
Always Statement	Limit of quantitation: Oxymorphone 50 ng/mL	

4700P Amikacin Peak

(Available Immediately)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Amikacin Peak	FPIA	20.0-25.0 ug/mL
Specimen/Stability	Serum Peak 1.0 (0.4) mL: Refrigerated 7 days, Frozen 2 months	
Collection Instructions	Specimens collected up to 1 hour after infusion or IM injection represent the Peak level. Separate the serum immediately after clotting and freeze in polypropylene tubes. Serum separator tubes are not acceptable. Please label the tubes as Peak.	
Schedule	Sunday, Tuesday - Saturday	
Report	Same day	
CPT Code	80150	
Regulatory Status	FDA Approved	
Always Statement	Peak concentration: 20.0-25.0 ug/mL (collected 30-60 min after injection)	

4700T Amikacin Trough

(Available Immediately)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Amikacin Trough	FPIA	1.0-8.0 ug/mL
Specimen/Stability	Serum Trough 1.0 (0.4) mL: Refrigerated 7 days, Frozen 2 months	
Collection Instructions	Specimens collected immediately before the next dose represents the Trough level. Separate the serum immediately after clotting and freeze in polypropylene tubes. Serum separator tubes are not acceptable. Please label the tubes as Trough.	
Schedule	Sunday, Tuesday - Saturday	
Report	Same day	
CPT Code	80150	
Regulatory Status	FDA Approved	
Always Statement	Trough concentration: 1.0-4.0 ug/mL (for less severe infection) 4.0-8.0 ug/mL (for more severe infection)	

New Tests (*Specialty*): (cont'd)

5270 AccuType™ Metformin (Available December 6)
 This test is not approved for the testing of patient samples from New York State.

Component	Method	Reference Range/Units
Metformin	PCR	By Report
Specimen/Stability	Whole Blood EDTA 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days	
Alt Specimen	Whole Blood ACD 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days	
Collection Instructions	Normal phlebotomy procedure. EDTA is the preferred anticoagulant, but ACD is also acceptable. Refrigerated specimens are also acceptable but not preferred. Ship ambient.	
Schedule	Monday, Wednesday, Friday	
Report	Within 3 days	
CPT Code	83891, 83900, 83892x2, 83914x2, 83909, 83912	
Regulatory Status	Laboratory Developed Test	
Note	This test is not approved for the testing of patient samples from New York State.	
Always Statement	This test(s) was developed and its performance characteristics have been determined by Specialty Laboratories. Performance characteristics refer to the analytical performance of the test.	
Clinical Utility	Polymorphisms in SLC22A1 gene (OCT1 protein) and SLC47A1 (MATE1 protein) were found to be associated with glucose lowering effect of metformin in patients with diabetes. OCT1 and MATE1 genotyping will determine the patient's therapeutic response to metformin.	

5270S AccuType™ Metformin - Saliva (Available December 6)
 This test is not approved for the testing of patient samples from New York State.

Component	Method	Reference Range/Units
Metformin	PCR	By Report
Specimen/Stability	Saliva 2.0 (1.0) mL: Ambient 8 days, Refrigerated 8 days, Frozen 8 days	
Collection Instructions	Use ORAGENE DNA Self Collection Kit OG-500 (2 mL) or OG-510 (1 mL). Ship ambient.	
Schedule	Monday, Wednesday, Friday	
Report	Within 3 days	
CPT Code	83891, 83900, 83892x2, 83914x2, 83909, 83912	
Regulatory Status	Laboratory Developed Test	
Note	This test is not approved for the testing of patient samples from New York State.	
Always Statement	This test(s) was developed and its performance characteristics have been determined by Specialty Laboratories. Performance characteristics refer to the analytical performance of the test.	
Clinical Utility	Polymorphisms in SLC22A1 gene (OCT1 protein) and SLC47A1 (MATE1 protein) were found to be associated with glucose lowering effect of metformin in patients with diabetes. OCT1 and MATE1 genotyping will determine the patient's therapeutic response to metformin.	

4258 Aripiprazole, Serum/Plasma (Available December 28)

Component	Method	Reference Range/Units
Aripiprazole	LC-MS-MS	ng/mL
Specimen/Stability	Serum 3.0 (0.5) mL: Ambient 7 days, Refrigerated 14 days, Frozen 30 days	
Alt Specimen	Plasma EDTA 3.0 (0.5) mL: Ambient 7 days, Refrigerated 14 days, Frozen 30 days	
Schedule	Tuesday, Thursday, Saturday	
Report	Within 3 days	
CPT Code	80299	
Regulatory Status	Laboratory Developed Test	
Always Statement	Steady state plasma levels in adults following a daily regimen have been reported as: 5 mg: 70 to 126 ng/mL 10 mg: 109 to 216 ng/mL 15 mg: 206 to 278 ng/mL 20 mg: 212 to 574 ng/mL 30 mg: 320 to 585 ng/mL	
Clinical Utility	Aripiprazole (Abilify®) is an atypical antipsychotic and antidepressant used in the treatment of schizophrenia, bipolar disorder, and clinical depression. The analysis of aripiprazole is used to monitor compliance with drug therapy.	

New Tests (*Specialty*): (cont'd)

5432 Cystic Fibrosis 23 Mutation Analysis (Available December 15)

Component	Method	Reference Range/Units
Cystic Fibrosis 23	PCR	Mutation not detected
Specimen/Stability Alt Specimen	Whole Blood EDTA 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days Whole Blood ACD 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days Liquid Cytology Media (ThinPrep or SurePath) 5.0 (1.5) mL: Ambient 4 weeks, Refrigerated 4 weeks	
Collection Instructions	Whole Blood: EDTA is the preferred anticoagulant, but ACD is also acceptable. Refrigerated and frozen specimens are acceptable, but not preferred. Cells: Collect cells in ThinPrep or SurePath media and ship refrigerated. Ship whole blood specimens at room temperature.	
Note	Informed consent is required for residents of New York. Consent form is available on our website www.specialtylabs.com .	
Schedule	Monday - Friday	
Report	Within 7 days	
CPT Code	83891, 83900, 83901x21, 83892, 83914x23, 83909, 83912	
Regulatory Status	FDA Approved	
Clinical Utility	Test detects 23 Cystic Fibrosis (CF) mutations recommended by the American College of Medical Genetics (ACMG) and the American College of Obstetricians and Gynecologists (ACOG). The assay will identify approximately 88% of CF mutations in the Caucasian population, 94% in the Ashkenazi Jewish population, 64% in the African-American population, 72% in the Hispanic-American population and 49% in the Asian-American population.	

5432FH Cystic Fibrosis 23 Mutation Analysis w/Family History (Available December 15)

Component	Method	Reference Range/Units
Cystic Fibrosis 23	PCR	By Report
Specimen/Stability Alt Specimen	Whole Blood EDTA 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days Whole Blood ACD 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days Liquid Cytology Media (ThinPrep or SurePath) 5.0 (1.5) mL: Ambient 4 weeks, Refrigerated 4 weeks	
Collection Instructions	Whole Blood: EDTA is the preferred anticoagulant, but ACD is also acceptable. Refrigerated and frozen specimens are acceptable, but not preferred. Cells: Collect cells in ThinPrep or SurePath media and ship refrigerated. Ship whole blood specimens at room temperature.	
Note	Interpretation of negative results and calculation of carrier risk in patients with positive family history are dependent on the rate of occurrence of these mutations in the patient's ethnic group and family history. Ethnic group and family history must be provided on the Molecular Genetics Testing Requisition. Informed consent is required for residents of New York. Consent form is available on our website www.specialtylabs.com .	
Schedule	Monday - Friday	
Report	Within 7 days	
CPT Code	83891, 83900, 83901x21, 83892, 83914x23, 83909, 83912	
Regulatory Status	FDA Approved	
Clinical Utility	Test detects 23 Cystic Fibrosis (CF) mutations recommended by the American College of Medical Genetics (ACMG) and the American College of Obstetricians and Gynecologists (ACOG). The assay will identify approximately 88% of CF mutations in the Caucasian population, 94% in the Ashkenazi Jewish population, 64% in the African-American population, 72% in the Hispanic-American population and 49% in the Asian-American population.	

New Tests (*Specialty*): (cont'd)

5434 Cystic Fibrosis 23 Mutation Analysis, Fetus w/Reflex MCC (Available December 15)

Component	Method	Reference Range/Units
Cystic Fibrosis Fetus	PCR	Mutation not detected
Specimen/Stability #1	Amniotic Fluid-Uncultured 20 (10) mL: Ambient 2 days	
Alt Specimen #1	Amniotic Fluid-Cultured T25 mL Flasks 2.0 (1.0) mL: Ambient 2 days	
Specimen/Stability #2	Whole Blood EDTA 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days	
Alt Specimen #2	Whole Blood ACD 5.0 (3.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days	
Collection Instructions	Amniotic Fluid: Do not refrigerate or freeze. Mother's blood should accompany any prenatal specimen for studies of potential maternal cell contamination. Ship at room temperature immediately. Whole Blood: EDTA is the preferred anticoagulant, but ACD is also acceptable. Refrigerated and frozen specimens are acceptable, but not preferred. Ship specimens at room temperature.	
Note	Informed consent is required for residents of New York. Consent form is available on our website www.specialtylabs.com . A maternal blood specimen must be sent with the fetal sample so that MCC testing can be performed if a possibility of maternal cell contamination exists. Please submit 5 (3 mL) of mother's blood, and if warranted, test will reflex to Maternal Cell Contamination Detection for an additional fee and extended turnaround time (add CPT codes 83891, 83900x2, 83901x6, 83909x2, 83912).	
Schedule	Monday - Friday	
Report	Within 14 days	
CPT Code	83891, 83900, 83901x21, 83892, 83914x23, 83909, 83912	
Regulatory Status	FDA Approved	
Clinical Utility	Test determines if the fetus has inherited known mutations, limited to mutation panel (23 mutations), from both parents. The assay detects approximately 88% of CF mutations in the Caucasian population, 94% in the Ashkenazi Jewish population, 64% in the African-American population, 72% in the Hispanic-American population and 49% in the Asian-American population.	

4973 Hemoglobin S, Quantitative (Available December 21)

Component	Method	Reference Range/Units
Hemoglobin S	HPLC	< 0.1 %
Specimen/Stability	Whole Blood EDTA 2.0 (1.0) mL: Ambient 2 days, Refrigerated 6 days	
Alt Specimen	Whole Blood Heparin 2.0 (1.0) mL: Ambient 2 days, Refrigerated 6 days	
Collection Instructions	Store and ship refrigerated.	
Schedule	Tuesday - Saturday	
Report	Within 2 days	
CPT Code	83021	
Regulatory Status	FDA Approved	
Note	Patient age and ethnicity are necessary for proper interpretation. Patient preparation: Blood transfusion within the last 4 months may affect results.	
Clinical Utility	Clinically used to monitor treatment of sickle cell disease.	

New Tests (*Specialty*): (cont'd)

4983

Hemoglobinopathy Evaluation

(Available December 21)

Component	Method	Reference Range/Units
Hemoglobin A	CALC	0-3 Months: 15.0-60.0% 4-6 Months: 60.0-92.0 % 7 Months-1 Year: >92.0% > 1 Year: >96.0%
Hemoglobin A2	HPLC	0-30 Days: <1.0% 31-90 Days: <2.3% 91-180 Days: <2.5% 181 Days-1 Year: < 2.7% > 1 Year: 1.8-3.5%
Hemoglobin F	HPLC	0-3 Months: 40.0-85.0% 4-6 Months: 8.0-40.0 % 7 Months-1 Year: <8.0% > 1 Year: <2.0 %
Hemoglobin S	HPLC	< 0.1 %
Hemoglobin C	HPLC	< 0.1 %
Hemoglobin E	HPLC	< 0.1 %
Hemoglobin Other	HPLC	< 0.1 %
RBC Total Count	Cell Count	0-3 Days: 4.00-6.60 x10E9/L 4-29 Days: 3.00-6.30 x10E9/L 1 Month-4 Years: 2.70-5.30 x10E9/L 5-13 Years: 3.90-5.30 x10E9/L Male > 13 Years: 4.50-6.00 x10E9/L Female > 13 Years: 4.00-5.50 x10E9/L
Hemoglobin	Cell Count	0-3 Days: 14.5-22.6 g/dL 4-29 Days: 10.0-21.5 g/dL 1 Month-4 Years: 9.5-13.5 g/dL 5-13 Years: 11.5-16.0 g/dL Male > 13 Years: 13.5-18.0 g/dL Female > 13 Years: 11.5-15.0 g/dL
Hematocrit	Cell Count	0-3 Days: 45.0-67.0 % 4-29 Days: 31.0-66.0 % 1 Month-4 Years: 28.0-40.0 % 5-13 Years: 34.0-49.0 % Male > 13 Years: 40.0-54.0 % Female > 13 Years: 37.0-47.0 %
MCV		0-3 Days: 95-121 fL 4-29 Days: 85-126 fL 1 Month-4 Years: 74-81 fL 5-13 Years: 75-102 fL > 13 Years: 80-96 fL
MCH		0-3 Days: 31-37 pg 4-29 Days: 28-40 pg 1 Month-4 Years: 25-31 pg 5-13 Years: 24-35 pg > 13 Years: 26-34 pg
RDW		11-15 %

Specimen/Stability
Alt Specimen
Collection Instructions
Schedule
Report
CPT Code
Regulatory Status
Clinical Utility

Whole Blood EDTA 2.0 (1.0) mL: Ambient 2 days, Refrigerated 6 days
Whole Blood Heparin 2.0 (1.0) mL: Ambient 2 days, Refrigerated 6 days
Store and ship refrigerated.
Tuesday - Saturday
Within 3 days
83021, 85041, 85018, 85014
FDA Approved
Used in the diagnosis of beta thalassemia sickling disorders, common structural hemoglobinopathies such as Hb S, C, E, D-Punjab, Lepore etc. It is also used in evaluating infants following abnormal newborn screening. Some forms of alpha-thalassemias are readily identified by HPLC e.g. when Hb Barts, Hb H, and/or Hb Constant Spring are observed. However, alpha-thalassemias resulting from only 1 or 2 alpha-globin gene deletion/nonfunction are not recognized in adults. Fortunately the majority (approximately 85-90%) of alpha thalassemia carriers have commonly encountered deletions which are identified in Alpha-Thalassemia DNA Mutation Analysis. Rarer forms of alpha thalassemia (point mutations and small insertions/deletions) can be detected by Alpha-Globin Complete.

New Tests (*Specialty*): (cont'd)

5311P Potassium Plasma (Available January 11)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Potassium Plasma	ISE	3.4-4.8 mmol/L

Specimen/Stability	Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
Collection Instructions	Reject moderate to gross hemolysis. Transport at room temperature.
Schedule	Monday - Saturday
Report	Same day
CPT Code	84132
Regulatory Status	FDA Approved
Clinical Utility	Potassium measurements are useful in the monitoring of electrolyte balance and aid in the diagnosis and treatment of disease conditions characterized by low or high blood potassium levels. Potassium is elevated in adrenal cortical insufficiency, acute renal failure and in some cases of diabetic acidosis. Potassium is decreased in diuretic administration and renal tubular acidosis.

4701P Gentamicin Peak (Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Gentamicin Peak	IA	5.0-10.0 mg/L

Specimen/Stability	Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Alt Specimen	Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Collection Instructions	Collect peak at the end of the a 60 minute IV infusion, 30 minutes after the end of a 30 minute IV infusion or 60 minutes after the IM dose. Serum separator tubes are not acceptable. Transport room temperature. Please label the tube as Peak.
Schedule	Monday - Saturday
Report	Same day
CPT Code	80170
Regulatory Status	FDA Approved

4701T Gentamicin Trough (Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Gentamicin Trough	IA	1.0-2.0 mg/L

Specimen/Stability	Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Alt Specimen	Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Collection Instructions	Collect trough just before next dose. Serum separator tubes are not acceptable. Transport room temperature. Please label the tube as Trough
Schedule	Monday - Saturday
Report	Same day
CPT Code	80170
Regulatory Status	FDA Approved

4702P Tobramycin Peak (Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Tobramycin Peak	IA	5.0-10.0 mg/L

Specimen/Stability	Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Alt Specimen	Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
	Plasma EDTA Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Collection Instructions	Collect peak at the end of 60 minute IV infusion, or 30-60 minutes after IM dose. Serum separator tubes are not acceptable. Moderate to grossly lipemic specimens will be rejected. Transport room temperature. Please label the tubes as Peak.
Schedule	Monday - Saturday
Report	Same day
CPT Code	80200
Regulatory Status	FDA Approved

New Tests (*Specialty*): (cont'd)

4702T Tobramycin Trough

(Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Tobramycin Trough	IA	1.0-2.0 mg/L
Specimen/Stability	Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Alt Specimen	Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Collection Instructions	Collect trough just before next dose. Serum separator tubes are not acceptable. Moderate to grossly lipemic specimens will be rejected. Transport room temperature. Please label the tubes as Trough.	
Schedule	Monday - Saturday	
Report	Same day	
CPT Code	80200	
Regulatory Status	FDA Approved	

4703P Vancomycin Peak

(Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Vancomycin Peak	IA	20.0-40.0 mg/L
Specimen/Stability	Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Alt Specimen	Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Collection Instructions	Collect peak 1-2 hours after 60-minute IV infusion. Transport room temperature. Please label the tubes as Peak.	
Schedule	Monday - Saturday	
Report	Same day	
CPT Code	80202	
Regulatory Status	FDA Approved	

4703T Vancomycin Trough

(Available January 18)

<u>Component</u>	<u>Method</u>	<u>Reference Range/Units</u>
Vancomycin Trough	IA	10.0-20.0 mg/L
Specimen/Stability	Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Alt Specimen	Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days	
Collection Instructions	Collect trough just prior to next dose. Transport room temperature. Please label the tubes as Trough.	
Schedule	Monday - Saturday	
Report	Same day	
CPT Code	80202	
Regulatory Status	FDA Approved	
Always Statement	Vancomycin trough concentrations should be at least 10.0 mg/L. For invasive infections or when bacterial isolates exhibit vancomycin MICs between 1-2 mcg/mL, trough concentrations of 15.0-20.0 mg/L should be considered. When MICs are > or = 2 mcg/mL, alternate therapies should be considered.	

Test Changes:

3114	Angiotensin Converting Enzyme (ACE)	Effectively Collection Instructions	Immediately Grossly hemolyzed samples will be rejected.
3515W	Vitamin B1 (Thiamine) Whole Blood	Effectively Specimen/Stability	Immediately Whole Blood EDTA Foil Wrapped 1.0 (0.5) mL: Refrigerated 24 hours, Frozen 30 days Whole Blood Heparin Foil Wrapped 1.0 (0.5) mL: Refrigerated 24 hours, Frozen 30 days Amber Tube 1.0 (0.5) mL: Refrigerated 24 hours, Frozen 30 days Note: Whole Blood Heparin specimens now accepted.
3990	PTH-Related Protein	Effectively Specimen/Stability	Immediately Plasma EDTA/Trasyolol 1.0 (0.3) mL: Frozen 1 month Plasma Heparin/Trasyolol 1.0 (0.3) mL: Frozen 1 month Note: Decreased frozen stability.
4861W	Lead Whole Blood	Effectively Collection Instructions	Immediately Collection material such as alcohol swabs should be lead-free. Use powder-free gloves or rinse the powder off with tap water. For capillary collection, wash hands thoroughly with soap and dry with clean, low-lint towel. Once washed, fingers must not come into contact with any surface, including the other fingers. Clean skin (finger or other area for venipuncture) with the lead-free alcohol swab prior to puncture. Avoid hemolysis. Avoid worksite collection. Whole Blood "Trace Metal": 1. Use the royal blue-topped "Trace Metal" evacuated tube with EDTA (Becton-Dickinson catalog #367736) for whole blood heavy metals. Evacuated tubes and transfer tubes are available from Client Supply. 2. (NEW) Send whole blood samples in the royal blue EDTA "Trace Metal" evacuated tube or pour off (do not pipette) the well-mixed blood into a transfer tube closed tightly to avoid leakage.
	Also Affected		DOS Codes 4861X, 4861I, 4861IX
5306U	Sodium without Creatinine, 24-hour Urine	Effectively Specimen/Stability	Immediately Urine 24 hour 10 (2.0) mL: Ambient 14 days, Refrigerated 14 days, Frozen 60 days Urine Acetic Acid 10 (2.0) mL: Ambient 14 days, Refrigerated 14 days, Frozen 60 days Urine Boric Acid 10 (2.0) mL: Ambient 14 days, Refrigerated 14 days, Frozen 60 days Urine HCl 10 (2.0) mL: Ambient 14 days, Refrigerated 14 days, Frozen 60 days Urinalysis Transport Tube 10 (2.0) mL: Ambient 14 days, Refrigerated 14 days, Frozen 60 days Note: Urine acidified with HCl is now accepted.
7489	HCV RNA, Quantitative RT PCR w/Reflex SubtypR®	Effectively Specimen/Stability	Immediately Plasma EDTA 5.0 (2.0): Frozen 42 days Plasma PPT Tube 5.0 (2.0): Frozen 42 days Serum 5.0 (2.0): Frozen 42 days Note: Increased serum specimen volume.

Test Changes: (cont'd)

7577 HCV RNA, Quantitative Real-Time PCR

Effective Immediately
 Specimen/Stability Plasma EDTA 3.0 (1.1): Refrigerated 3 days, Frozen 42 days
 Plasma PPT Tube 3.0 (1.1): Refrigerated 3 days, Frozen 42 days
 Serum 3.0 (1.1): Refrigerated 3 days, Frozen 42 days
Note: Refrigerated specimens are now accepted.

Collection Instructions Refrigerated plasma or serum is stable for 3 days if separated from cells and transferred to specified screw cap vials **(NEW)**.
 Blood should be collected in two (Red-top)SST(R) Serum Separation Tubes or in two sterile tubes using Plasma in EDTA (Lavender-top) or a (White-top) PPT Vacutainer(TM) plasma preparation tube. Separate plasma from whole blood within 6 hours of collection by centrifugation at 800 x g for 20 minutes at room temperature. Transfer the plasma from each tube into a properly identified, polypropylene screw cap vial and ship frozen.
 Please note: Plasma must be removed from centrifuged PPT tubes and transferred to specified screw cap vials and submitted frozen. Specimens will no longer be acceptable if plasma is still in original collection tube, EVEN IF SEPARATED BY CENTRIFUGATION. Specimens collected using heparin as the anticoagulant are unsuitable for this test.

Also Affected Reflex of DOS Code 7493 (2nd specimen)

1100 ANA w/International Units & Pattern

Effective	December 21		
Always Statement	IU/mL Method of Reporting	Titer Method of Reporting	
	<7.5	Not detected	
	8	1:40 - 1:80	
	15	1:80 - 1:320	
	30	1:160 - 1:640	
	50	1:320 - 1:1280	
	75	1:1280 - 1:5120	
	100	1:2560 - 1:10240	
	>=200	>= 1:10240	

Conversion Table:

The table compares previously reported ANA titers with the standardized International Unit format of reporting. Titers from other laboratories cannot be directly equated to this IU system.

20% of a healthy population exhibit weak positivity for Anti-nuclear antibody at 8 to 15 IU/mL. Also, the elderly, pregnant females and patients with tumors or chronic infections frequently have low titers of ANA.

Also Affected DOS Codes 1000, 1004, 1006, 1010, 1100C, 1118, 1121, 1122, 1126, 1127, 1726, 1862, 1866, 1868, 5906, 5908

3138 Anti-Mullerian Hormone AssessR™

Effective December 21
 Collection Instructions Separate serum from clot and ship frozen. Unspun SST tubes are not acceptable.
 Always Statement REFERENCE RANGES for Anti-Mullerian Hormone:
 Female:
 < 14 Years: 0.30 - 11.21 ng/mL **(NEW)**
 14-19 Years: Not established
 20-29 Years: 0.65 - 16.40 ng/mL **(NEW)**
 30-39 Years: 0.16 - 8.43 ng/mL **(NEW)**
 40-49 Years: < 5.20 ng/mL **(NEW)**
 > 49 Years: < 2.05 ng/mL **(NEW)**
 Male:
 < 1 Year: 101.90 - 262.00 ng/mL **(NEW)**
 1-6 Years: 87.30 - 243.80 ng/mL **(NEW)**
 7-11 Years: 34.30 - 230.10 ng/mL **(NEW)**
 12-17 Years: <135.45 ng/mL **(NEW)**
 > 17 Years: 1.45 - 15.27 ng/mL **(NEW)**

Test Changes: (cont'd)

3188 Hirsutism Evaluation (Female)

Effective	December 21
Component	Androstenedione (ADD)
Always Statement	REFERENCE RANGE for Androstenedione: Prepubertal: Less than 100 ng/dL Adult Male: 30-263 ng/dL Adult Female: 21-299 ng/dL Postmenopausal: Less than 100 ng/dL

4872U Manganese 24Hr Urine

Effective	December 21
Component	Manganese 24hr Urine
Reference Range	Male: 0.5 – 3.0 mcg/L (NEW) Female: 0.5 – 1.8 mcg/L (NEW)
Component	Total Volume mL (REMOVE)

4902 Tobramycin

Effective	December 21
Specimen/Stability	Serum 1.0 (0.2) mL: Ambient 7 days, Refrigerated 7 days, Frozen 7 days Note: Decreased frozen stability.
Collection Instructions	Patient preparation: Peak: Collect 30 minutes after end of IV infusion or 60-90 minutes after IM dose. Trough: Collect just prior to next dose. Collect serum in a red-top tube (no gel). Collect serum in a red-top tube (no gel). Serum separator tubes are not acceptable. Please label the tubes as Peak or Trough.
Also Affected	DOS Codes 4902P

4974 Hemoglobin A2, Quantitative

Effective	December 21
Specimen/Stability	Whole Blood EDTA 2.0 (0.5) mL: Ambient 2 days, Refrigerated 6 days Whole Blood Heparin 2.0 (0.5) mL: Ambient 2 days, Refrigerated 6 days Note: Ambient specimens now accepted; heparinized whole blood specimens now accepted; decreased refrigerated stability.
Note	Patient age and ethnicity are necessary for proper interpretation. Patient preparation: Blood transfusions within the last 4 months may affect results.
Reference Range	0 – 30 Days: < 1.0 % (NEW) 31 – 90 Days: < 2.3 % (NEW) 91 - 180 Days: < 2.5 % (NEW) 181 Days - 1 Year: < 2.7 % (NEW) > 1 Year: 1.8 – 3.5 % (NEW)

4976 Hemoglobin F, Quantitative

Effective	December 21
Name	Fetal Hemoglobin, Whole Blood (NEW)
Specimen/Stability	Whole Blood EDTA 2.0 (0.5) mL: Ambient 2 days, Refrigerated 6 days Whole Blood Heparin 2.0 (0.5) mL: Ambient 2 days, Refrigerated 6 days Note: Ambient specimens now accepted; heparinized whole blood specimens now accepted; decreased refrigerated stability.
Note	Patient age and ethnicity are necessary for proper interpretation. Patient preparation: Blood transfusions within the last 4 months may affect results.
Reference Range	0 – 3 Months: 40.0-85.0 % (NEW) 4 – 6 Months: 8.0 – 40.0 % (NEW) 7 Months – 1 Year: < 8.0 % (NEW) > 1 Year: < 2.0 % (NEW)

Test Changes: (cont'd)

4985	Sickle Cell MonitR™	<p>Effective December 21</p> <p>Specimen/Stability Whole Blood EDTA 2.0 (0.5) mL: Ambient 2 days, Refrigerated 6 days</p> <p>Note: Ambient specimens now accepted; decreased refrigerated stability.</p> <p>Component Hemoglobin A:</p> <p>Reference Range 0 – 3 Months: 15.0-60.0 % (NEW) 4 – 6 Months: 60.0 – 92.0 % (NEW) 7 Months – 1 Year: > 92.0 % (NEW) > 1 Year: > 96.0 % (NEW)</p> <p>Component Hemoglobin A2:</p> <p>Reference Range 0 – 30 Days: < 1.0 % (NEW) 31 – 90 Days: < 2.3 % (NEW) 91 - 180 Days: < 2.5 % (NEW) 181 Days - 1 Year: < 2.7 % (NEW) > 1 Year: 1.8 – 3.5 % (NEW)</p> <p>Component Hemoglobin F:</p> <p>Reference Range 0 – 3 Months: 40.0-85.0 % (NEW) 4 – 6 Months: 8.0 – 40.0 % (NEW) 7 Months – 1 Year: < 8.0 % (NEW) > 1 Year: < 2.0 % (NEW)</p> <p>Component Hemoglobin S:</p> <p>Reference Range < 0.1 % (same)</p> <p>Component Hemoglobin C:</p> <p>Reference Range < 0.1 % (same)</p> <p>Also Affected DOS Code 4970 (A2 & F)</p>
EX71	Allergen – Animal Epidermals & Proteins Mix IgE: EX71	<p>Effective December 21</p> <p>Name Allergen – Mixed Feathers IgE (NEW)</p>
1510	Albumin	<p>Effective January 11</p> <p>Specimen/Stability Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 1 month, Frozen 6 months Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 1 month, Frozen 6 months</p> <p>Note: Increased refrigerated and frozen stability.</p> <p>Collection Instructions Avoid repeated freeze-thaw cycles. Transport room temperature.</p> <p>Also Affected DOS Codes 5314, 5317, 5318 (reference ranges only)</p>
1392	Aldolase	<p>Effective January 11</p> <p>Specimen/Stability Serum 1.0 (0.5) mL: Refrigerated 5 days, Frozen 14 days</p> <p>Note: Decreased refrigerated and frozen stability; ambient specimens no longer accepted.</p> <p>Collection Instructions Hemolyzed specimens will be rejected. Transport refrigerated.</p> <p>Methodology Enzymatic (NEW)</p> <p>Reference Range < 24 Months: 3.4-11.8 U/L (NEW) 2 – 17 Years: 3.4-8.6 U/L (NEW) > 17 Years: <8.2 U/L (NEW)</p>
3844	Amylase	<p>Effective January 11</p> <p>Specimen/Stability Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days</p> <p>Note: Decreased frozen stability.</p> <p>Collection Instructions Grossly hemolyzed specimens will be rejected. Transport room temperature.</p> <p>Methodology Spectrophotometry (NEW)</p> <p>Reference Range 21 – 101 U/L (NEW)</p> <p>Also Affected DOS Code 3846 (reference range only)</p>

Test Changes: (cont'd)

3930

Alkaline Phosphatase

Effective	January 11
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Note: Increased ambient and refrigerated stability; decreased frozen stability.
Collection Instructions	Grossly hemolyzed specimens will be rejected. Avoid repeated freeze-thaw cycles. Transport room temperature.
Methodology	Spectrophotometry (NEW)
Reference Range	Age: Male Female: 0 – 30 Days: 75 – 316 U/L (NEW) 48 – 406 U/L (NEW) 1 – 11 Months: 82 – 383 U/L (NEW) 124 – 341 U/L (NEW) 1 - 3 Years: 104 – 345 U/L (NEW) 108 – 317 U/L (NEW) 4 - 6 Years: 93 – 309 U/L (NEW) 96 – 297 U/L (NEW) 7 - 9 Years: 47 – 324 U/L (NEW) 184 – 415 U/L (NEW) 10 – 12 Years: 91 - 476 U/L (NEW) 104 - 471 U/L (NEW) 13 – 15 Years: 92 - 468 U/L (NEW) 41 - 244 U/L (NEW) 16 – 19 Years: 48 - 230 U/L (NEW) 47 - 176 U/L (NEW) 20 – 49 Years: 40 - 115 U/L (NEW) 33 - 115 U/L (NEW) > 49 Years: 40 - 115 U/L (NEW) 33 - 130 U/L (NEW)
Also Affected	DOS Codes 3996, 5317, 5318 (reference ranges only)

1347

ALT (SGPT)

Effective	January 11
Name	Alanine Aminotransferase (NEW)
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 3 days, Refrigerated 5 days Plasma Heparin 1.0 (0.5) mL: Ambient 3 days, Refrigerated 5 days Note: Decreased refrigerated stability; frozen specimens no longer accepted.
Collection Instructions	Grossly hemolyzed specimens will be rejected. Avoid repeated freeze-thaw cycles. Transport room temperature.
Methodology	Spectrophotometry (NEW)
Reference Range	Age: Male Female: 0 – 30 Days: 3 – 25 U/L (NEW) 3 – 25 U/L (NEW) 1 – 11 Months: 4 – 35 U/L (NEW) 3 – 30 U/L (NEW) 1 - 3 Years: 5 – 30 U/L (NEW) 5 – 30 U/L (NEW) 4 - 12 Years: 8 – 30 U/L (NEW) 8 – 24 U/L (NEW) 13 – 15 Years: 7 - 32 U/L (NEW) 6 - 19 U/L (NEW) 16 – 19 Years: 8 - 46 U/L (NEW) 5 - 32 U/L (NEW) > 19 Years: 9 - 60 U/L (NEW) 6 - 40 U/L (NEW)
Also Affected	DOS Codes 5317, 5318 (reference ranges only)

1345

AST (SGOT)

Effective	January 11
Name	Aspartate Aminotransferase (NEW)
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days, Frozen 5 days Plasma Heparin 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days, Frozen 28 days Note: Decreased ambient and frozen stability.
Collection Instructions	Moderate and grossly hemolyzed specimens will be rejected. Avoid repeated freeze-thaw cycles. Transport room temperature.
Methodology	Spectrophotometry (NEW)
Reference Range	Age: Male Female: 0 – 30 Days: 3 – 51 U/L (NEW) 3 – 49 U/L (NEW) 1 – 11 Months: 3 – 65 U/L (NEW) 3 – 79 U/L (NEW) 1 - 3 Years: 3 – 56 U/L (NEW) 3 – 69 U/L (NEW) 4 - 6 Years: 20 – 39 U/L (NEW) 20 – 39 U/L (NEW) 7 – 19 Years: 12 - 32 U/L (NEW) 12 - 32 U/L (NEW) 20 – 44 Years: 10 - 40 U/L (NEW) 10 - 30 U/L (NEW) 45 – 49 Years: 10 - 40 U/L (NEW) 10 - 35 U/L (NEW) > 49 Years: 10 - 35 U/L (NEW) 10 - 35 U/L (NEW)
Also Affected	DOS Codes 5317, 5318 (reference ranges only)

Test Changes: (cont'd)

3554

Bilirubin, Total

Effective	January 11
Specimen/Stability	Serum Foil Wrapped 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Plasma Heparin Foil Wrapped 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Amber Tube 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Note: Decreased ambient and refrigerated stability; increased frozen stability.
Collection Instructions	Protect from light by wrapping a spun SST® in foil or transferring serum or plasma to an amber transport vial. Moderate and grossly hemolyzed specimens will be rejected. Transport room temperature.
Reference Range	1 Day: <5.2 mg/dL (NEW) 2 Days: <7.3 mg/dL (NEW) 3 – 5 Days: <10.4 mg/dL (NEW) 6 – 7 Days: <8.5 mg/dL (NEW) 8 – 9 Days: <6.6 mg/dL (NEW) 10 – 11 Days: <4.7 mg/dL (NEW) 12 – 13 Days: <2.8 mg/dL (NEW) 14 Days – 9 Years: 0.2 – 0.8 mg/dL (NEW) 10 – 19 Years: 0.2 – 1.1 mg/dL (NEW) > 19 Years: 0.2 – 1.2 mg/dL (NEW)
Always Statement	Total bilirubin levels should gradually decrease over the first 2 weeks of life in full term infants. Upper limits of the reference range were linearly interpolated between 5 days and 14 days.
Also Affected	DOS Codes 5317, 5318 (reference ranges only)

5313

Bilirubin, Total & Direct

Effective	January 11
Specimen/Stability	Serum Foil Wrapped 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Plasma Heparin Foil Wrapped 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Amber Tube 1.0 (0.5) mL: Ambient 1 day, Refrigerated 3 days, Frozen 3 months Note: Decreased refrigerated stability; increased frozen stability.
Collection Instructions	Grossly hemolyzed specimens will be rejected. Separate within 1 hour of collection. Transport room temperature in foil wrapped serum or amber tube. transport plastic tube.
Reference Range	Total Bilirubin: 1 Day: <5.2 mg/dL (NEW) 2 Days: <7.3 mg/dL (NEW) 3 – 5 Days: <10.4 mg/dL (NEW) 6 – 7 Days: <8.5 mg/dL (NEW) 8 – 9 Days: <6.6 mg/dL (NEW) 10 – 11 Days: <4.7 mg/dL (NEW) 12 – 13 Days: <2.8 mg/dL (NEW) 14 Days – 9 Years: 0.2 – 0.8 mg/dL (NEW) 10 – 19 Years: 0.2 – 1.1 mg/dL (NEW) > 19 Years: 0.2 – 1.2 mg/dL (NEW)
Reference Range	Direct Bilirubin: <0.3 mg/dL (NEW)
Reference Range	Indirect Bilirubin: 1 Day: <5.2 mg/dL (NEW) 2 Days: <7.3 mg/dL (NEW) 3 – 5 Days: <10.4 mg/dL (NEW) 6 – 7 Days: <8.5 mg/dL (NEW) 8 – 9 Days: <6.6 mg/dL (NEW) 10 – 11 Days: <4.7 mg/dL (NEW) 12 – 13 Days: <2.8 mg/dL (NEW) 14 Days – 9 Years: 0.2 – 0.8 mg/dL (NEW) 10 – 19 Years: 0.2 – 1.1 mg/dL (NEW) > 19 Years: 0.2 – 1.2 mg/dL (NEW)
Also Affected	DOS Codes 5318 (reference ranges only)

Test Changes: (cont'd)

6820	Bile Acid, Total Effective Collection Instructions Reference Range	January 11 Fast for minimum 8 hours. Transport room temperature. < 10.1 umol/L (NEW)
5300	Bicarbonate Effective Collection Instructions Methodology Reference Range Also Affected	January 11 Preferred specimen: Collect 5 mL whole blood in an SST tube (preferred) and spin – do not open tube. Centrifuge within 30 minutes after drawing. Exposure of samples to air should be minimized. Samples should be stored tightly sealed to prevent loss of CO ₂ and assayed as soon as possible after collection. Transport room temperature. Spectrophotometry (NEW) 21 – 33 mmol/L (NEW) DOS Codes 5314, 5315, 5316, 5317 (reference ranges only)
4836	Calcium, Total Effective Specimen/Stability Collection Instructions Reference Range Also Affected	January 11 Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Note: Plasma heparin now accepted; decreased frozen stability. Transport room temperature. 0 – 30 Days: 8.4 – 10.6 mg/dL (NEW) 1 – 11 Months: 8.7 – 10.5 mg/dL (NEW) 1 - 3 Years: 8.5 – 10.6 mg/dL (NEW) 4 – 19 Years: 8.9 – 10.4 mg/dL (NEW) > 19 Years: 8.6 – 10.2 mg/dL (NEW) DOS Codes 3208, 3213, 3942, 3943, 3943SR, 3944, 3945, 5314, 5315, 5317 (reference range only)
5303	Chloride Effective Specimen/Stability Collection Instructions Reference Range Also Affected	January 11 Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Note: Decreased frozen stability. Grossly hemolyzed specimens will be rejected. Transport room temperature. 98 – 110 mmol/L (NEW) DOS Codes 5314, 5315, 5316, 5317 (reference ranges only)
3352	Cholesterol, HDL Effective Specimen/Stability Collection Instructions Always Statement Reference Range Also Affected	January 11 Serum 1.0 (0.5) mL: Ambient 48 hours, Refrigerated 7 days Plasma Heparin 1.0 (0.5) mL: Ambient 48 hours, Refrigerated 7 days Note: Decreased ambient stability; frozen specimens no longer accepted. Patient preparation: Patient should fast 9-12 hours prior to collection. Do not use citrate, oxalate, or fluoride as anticoagulants. Grossly hemolyzed specimens will be rejected. Transport room temperature. REMOVE Age: Male: Female: 0 – 4 Years: Not established Not established 5 – 14 Years: 38- 76 mg/dL (NEW) 37- 75 mg/dL (NEW) 15 – 19 Years: 31- 65 mg/dL (NEW) 36- 76 mg/dL (NEW) > 19 Years: >39 mg/dL (NEW) >45 mg/dL (NEW) DOS Code 3454 (reference ranges only)

Test Changes: (cont'd)

3351	Cholesterol, LDL Direct	Effective	January 11
	Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 8 days, Refrigerated 30 days, Frozen 30 days Plasma EDTA 1.0 (0.5) mL: Ambient 8 days, Refrigerated 30 days, Frozen 30 days Plasma Heparin 1.0 (0.5) mL: Ambient 8 days, Refrigerated 30 days, Frozen 30 days	
		Note: Increased ambient and refrigerated stability; decreased frozen stability.	
	Collection Instructions	Patient preparation: Patient should fast 9-12 hours before specimen collection. Transport room temperature.	
	Reference Range	<130 mg/dL (NEW)	
3350	Cholesterol, Total	Effective	January 11
	Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 3 months Plasma Heparin 1.0 (0.5) mL: Ambient 2 days, Refrigerated 2 days, Frozen 6 months	
		Note: Increased frozen stability; decreased ambient and refrigerated plasma stability.	
	Collection Instructions	Grossly hemolyzed specimens will be rejected. Moderate and grossly icteric specimens will be rejected. Transport room temperature.	
	Reference Range	0 – 19 Years: 125 – 170 mg/dL (NEW) > 19 Years: 125 – 200 mg/dL (NEW)	
	Also Affected	DOS Codes 3445, 3454, 5921 (reference range only)	
1600	Complement Functional Activity CH50	Effective	January 11
	Name:	Complement, Total (CH50) (NEW)	
	Collection Instructions	Grossly hemolyzed specimens will be rejected. Transport frozen.	
	Methodology	Liposome (NEW)	
	Reference Range	31 – 60 U/mL (NEW)	
	Also Affected	DOS Code 1021	
3976	Creatine Kinase (CK)	Effective	January 11
	Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 3 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 3 days, Refrigerated 7 days, Frozen 28 days	
		Note: Decreased frozen stability.	
	Collection Instructions	Grossly hemolyzed specimens will be rejected. Transport room temperature.	
	Methodology	Spectrophotometry (NEW)	
	Reference Range	Age:	Male: Female:
		0 - 3 Days:	<1578 U/L (NEW) <1578 U/L (NEW)
		4 – 28 Days:	<183 U/L (NEW) <134 U/L (NEW)
		1 – 11 Months:	<136 U/L (NEW) <143 U/L (NEW)
		1 – 6 Years:	<160 U/L (NEW) <143 U/L (NEW)
		7 – 9 Years:	<177 U/L (NEW) <143 U/L (NEW)
		10 – 12 Years:	<217 U/L (NEW) <143 U/L (NEW)
		13 – 18 Years:	<245 U/L (NEW) <143 U/L (NEW)
		> 18 Years:	44-196 U/L (NEW) 29-143 U/L (NEW)
	Also Affected	DOS Code 3851 (reference range only)	

Test Changes: (cont'd)

1320

Creatinine

Effective

Specimen/Stability

January 11

Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days

Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days

Note: Decreased frozen stability.

Collection Instructions

Grossly icteric specimens will be rejected. Transport room temperature.

Reference Range

Age:	Male:	Female:
0 - 2 Days:	0.79-1.58 mg/dL (NEW)	0.79-1.58 mg/dL (NEW)
3 - 5 Days:	0.46-1.23 mg/dL (NEW)	0.46-1.23 mg/dL (NEW)
6 - 7 Days:	0.37-1.05mg/dL (NEW)	0.37-1.05mg/dL (NEW)
8 - 30 Days:	0.35-0.92 mg/dL (NEW)	0.35-0.92 mg/dL (NEW)
1 - 11 Months:	0.27-0.72 mg/dL (NEW)	0.27-0.72 mg/dL (NEW)
1 - 3 Years:	0.30-0.70 mg/dL (NEW)	0.30-0.70 mg/dL (NEW)
4 - 6 Years:	0.29 - 0.68 mg/dL (NEW)	0.29 - 0.68 mg/dL (NEW)
7 - 9 Years:	0.38 - 0.73 mg/dL (NEW)	0.38 - 0.73 mg/dL (NEW)
10 - 12 Years:	0.42 - 0.78 mg/dL (NEW)	0.42 - 0.78 mg/dL (NEW)
13 - 15 Years:	0.54 - 0.95 mg/dL (NEW)	0.54 - 0.95 mg/dL (NEW)
16 - 17 Years:	0.70 - 1.16 mg/dL (NEW)	0.51 - 1.00 mg/dL (NEW)
18 - 19 Years:	0.67 - 1.26 mg/dL (NEW)	0.48 - 1.01 mg/dL (NEW)
20 - 29 Years:	0.80 - 1.30 mg/dL (NEW)	0.57 - 1.03 mg/dL (NEW)
30 - 39 Years:	0.79 - 1.33 mg/dL (NEW)	0.58 - 1.06 mg/dL (NEW)
40 - 49 Years:	0.78 - 1.34 mg/dL (NEW)	0.59 - 1.07 mg/dL (NEW)
50 - 59 Years:	0.76 - 1.46 mg/dL (NEW)	0.60 - 1.10 mg/dL (NEW)
60 - 69 Years:	0.76 - 1.46 mg/dL (NEW)	0.60 - 1.18 mg/dL (NEW)
> 69 Years:	0.67 - 1.54 mg/dL (NEW)	0.63 - 1.22 mg/dL (NEW)

Also Affected

DOS Codes 1322, 1325 (ranges and specimen changes), 5314, 5315, 5317 (ranges only)

3347

Fatty Acids, Free (Non-Esterified)

Effective

Collection Instructions

January 11

Grossly hemolyzed and lipemic specimens will be rejected. Patient should fast 12 hours prior to specimen collection. Separate serum from clot as soon as possible and freeze. Any specimen containing heparin is unsuitable for analysis; hence, this test is not suitable for patients on heparin therapy. Transport frozen.

Reference Range

< 1 Month:	< 2.3 mmol/L (NEW)
1 - 11 Months:	0.50-1.60 mmol/L (NEW)
1 - 7 Years:	0.60-1.50 mmol/L (NEW)
8 - 17 Years:	0.20-1.10 mmol/L (NEW)
> 17 Years:	0.07-0.88 mmol/L (NEW)

3934

Fructosamine

Effective

Specimen/Stability

January 11

Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 2 weeks, Frozen 1 month

Plasma EDTA 1.0 (0.5) mL: Ambient 3 days, Refrigerated 2 weeks, Frozen 1 month

Plasma Heparin 1.0 (0.5) mL: Ambient 3 days, Refrigerated 2 weeks, Frozen 1 month

Note: Increased refrigerated stability; decreased frozen stability and decreased ambient plasma stability.

Collection Instructions

Moderate and grossly hemolyzed and icteric specimens will be rejected.

Transport room temperature.

Methodology

Colorimetry **(NEW)**

Reference Range

190-270 umol/L **(NEW)**

Test Changes: (cont'd)

5302

Gamma-Glutamyl Transferase (GGT)

Effective January 11
 Specimen/Stability Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
Note: Plasma heparin no longer accepted; decreased frozen stability.
 Collection Instructions Grossly hemolyzed specimens will be rejected. Transport room temperature.
 Methodology Spectrophotometry (NEW)
 Reference Range

Age:	Male:	Female:
0 – 5 Months:	12-122 U/L (NEW)	15-132 U/L (NEW)
6 – 11 Months:	< 40 U/L (NEW)	< 40 U/L (NEW)
1 – 12 Years:	3- 22 U/L (NEW)	3- 22 U/L (NEW)
13 – 15 Years:	8- 32 U/L (NEW)	7- 18 U/L (NEW)
16 – 19 Years:	9- 31 U/L (NEW)	6- 26 U/L (NEW)
20 – 29 Years:	3- 70 U/L (NEW)	3- 40 U/L (NEW)
30 – 39 Years:	3- 90 U/L (NEW)	3- 50 U/L (NEW)
40 – 54 Years:	3- 95 U/L (NEW)	3- 55 U/L (NEW)
55 – 59 Years:	3- 85 U/L (NEW)	3- 70 U/L (NEW)
> 59 Years:	3- 70 U/L (NEW)	3- 65 U/L (NEW)

5301

Glucose

Effective January 11
 Specimen/Stability Serum 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days, Frozen 28 days
 Plasma Fluoridated 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
 Plasma Heparin 1.0 (0.5) mL: Ambient 2 days, Refrigerated 7 days, Frozen 28 days
Note: Plasma EDTA specimens no longer accepted; increased ambient and refrigerated stability; decreased frozen stability.
 Collection Instructions Fasting specimen is preferred. Avoid hemolysis. Transport room temperature.
 Methodology Spectrophotometry (NEW)
 Reference Range 65-99 mg/dL (NEW)
 Also Affected DOS Codes 5314, 5315, 5317 (reference ranges only)

5301C

Glucose CSF

Effective January 11
 Specimen/Stability CSF 1.0 (0.5) mL: Refrigerated 2 days, Frozen 28 days
Note: Deceased refrigerated and frozen stability.
 Collection Instructions Freeze immediately after collection. Transport frozen.
 Reference Range 40-80 mg/dL (NEW)

3532

Iron

Effective January 11
 Specimen/Stability Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
 Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
Note: Increased ambient and deceased frozen stability.
 Collection Instructions Avoid hemolysis. Transport room temperature.
 Reference Range

Age:	Male:	Female:
0 – 30 Days:	32-112 ug/dL (NEW)	29-127 ug/dL (NEW)
1 – 11 Months:	27-109 ug/dL (NEW)	25-126 ug/dL (NEW)
1 – 3 Years:	29- 91 ug/dL (NEW)	25-101 ug/dL (NEW)
4 – 19 Years:	27-164 ug/dL (NEW)	27-164 ug/dL (NEW)
20 – 29 Years:	45-175 ug/dL (NEW)	40-175 ug/dL (NEW)
30 – 49 Years:	45-170 ug/dL (NEW)	40-175 ug/dL (NEW)
> 49 Years:	45-170 ug/dL (NEW)	40-160 ug/dL (NEW)

Test Changes: (cont'd)

3534

Iron Binding Capacity Plus % Saturation

Effective	January 11
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
Collection Instructions	Note: Increased ambient and decreased frozen stability. Moderate and grossly hemolyzed specimens will be rejected. Transport room temperature.
Reference Range	Iron: Age: Male: Female: 0 – 30 Days: 32-112 ug/dL (NEW) 29-127 ug/dL (NEW) 1 – 11 Months: 27-109 ug/dL (NEW) 25-126 ug/dL (NEW) 1 – 3 Years: 29- 91 ug/dL (NEW) 25-101 ug/dL (NEW) 4 – 19 Years: 27-164 ug/dL (NEW) 27-164 ug/dL (NEW) 20 – 29 Years: 45-175 ug/dL (NEW) 40-175 ug/dL (NEW) 30 – 49 Years: 45-170 ug/dL (NEW) 40-175 ug/dL (NEW) > 49 Years: 45-170 ug/dL (NEW) 40-160 ug/dL (NEW)
Reference Range	TIBC: Age: Male: Female: 0 – 30 Days: 94-232 ug/dL (NEW) 94-236ug/dL (NEW) 1 – 5 Months: 116-322 ug/dL (NEW) 89-311 ug/dL (NEW) 6 – 11 Months: 176-384 ug/dL (NEW) 138-365 ug/dL (NEW) 1 – 19 Years: 271-448 ug/dL (NEW) 271-448 ug/dL (NEW) > 19 Years: 250-425 ug/dL (NEW) 250-450 ug/dL (NEW)
Reference Range	% Saturation: Age: Male: Female: 0 – 11 Months: Not established (NEW) Not established (NEW) 1 – 12 Years: 8-48 % (NEW) 8-45 % (NEW) 13 – 19 Years: 9-52 % (NEW) 8-45 % (NEW) > 19 Years: 20-50 % (NEW) 15-50 % (NEW)
Also Affected	DOS Code 3535 (reference ranges only)

3452

Lactate Dehydrogenase

Effective	January 11
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 14 days, Refrigerated 2 days Plasma Heparin 1.0 (0.5) mL: Ambient 14 hours
Collection Instructions	Note: Increased ambient stability. Moderate and grossly hemolyzed specimens will be rejected. Transport room temperature.
Methodology	Spectrophotometry (NEW)
Reference Range	Age: Male: Female: < 1 Month: 125-735 U/L (NEW) 145-765 U/L (NEW) 1 – 11 Months: 170-450 U/L (NEW) 190-420 U/L (NEW) 1 - 3 Years: 155-345 U/L (NEW) 165-395 U/L (NEW) 4 - 6 Years: 155-345 U/L (NEW) 135-345 U/L (NEW) 7 - 10 Years: 140-270 U/L (NEW) 140-270 U/L (NEW) 11 – 13 Years: 110-250 U/L (NEW) 110-250 U/L (NEW) 14 – 17 Years: 110-230 U/L (NEW) 110-230 U/L (NEW) 18 – 49 Years: 100-220 U/L (NEW) 100-200 U/L (NEW) > 49 Years: 120-250 U/L (NEW) 120-250 U/L (NEW)
Also Affected	DOS Code 3453 (reference ranges only)

3369

Lipase

Effective	January 11
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days, Frozen 21 days
Collection Instructions	Note: Plasma Heparin is no longer accepted; decreased ambient and frozen stability. Grossly icteric specimens will be rejected. Avoid repeated freeze-thaw cycles. Transport room temperature.
Methodology	Spectrophotometry (NEW)
Reference Range	7 – 60 U/L (NEW)

Test Changes: (cont'd)

3446	Lipoprotein [a] Effective Specimen/Stability	January 11 Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 14 days, Frozen 90 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 14 days, Frozen 90 days Plasma EDTA 1.0 (0.5) mL: Ambient 7 days, Refrigerated 14 days, Frozen 90 days Note: Increased ambient and decreased refrigerated and frozen stability.
	Collection Instructions	Grossly hemolyzed, icteric and lipemic specimens will be rejected. Transport room temperature.
	Methodology	Immunoturbidometric(NEW)
	Always Statement	REMOVE
	Reference Range	< 75 nmol/L (NEW)
	Also Affected	DOS Codes 1900, 5973, 5990, 5991 (reference ranges only)
4866	Magnesium Effective Specimen/Stability	January 11 Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Note: Decreased frozen stability.
	Collection Instructions	Grossly hemolyzed specimens will be rejected. Transport room temperature.
	Reference Range	1.5 – 2.5 mg/dL (NEW)
4174	Nucleotidase, 5' Effective Specimen/Stability	January 11 Serum 1.0 (0.5) mL: Refrigerated 7 days, Frozen 14 days Note: Ambient specimens no longer accepted, decreased frozen stability.
	Collection Instructions	Transport refrigerated.
	Reference Range	< 11 U/L (NEW)
5308	Phosphorus, Inorganic Effective Name: Specimen/Stability	January 11 Phosphate (Phosphorus) (NEW) Serum 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 7 days, Frozen 28 days Note: Plasma Heparin is no longer accepted; decreased ambient and frozen stability.
	Collection Instructions	Moderate and grossly hemolyzed specimens will be rejected. Transport refrigerated.
	Reference Range	0 – 6 Days: 4.0 – 9.0 mg/dL (NEW) 7 Days – 2 Years: 4.0 – 8.0 mg/dL (NEW) 3 - 12 Years: 3.0 – 6.0 mg/dL (NEW) 13 – 64 Years: 2.5 – 4.5 mg/dL (NEW) > 64 Years: 2.1 – 4.3 mg/dL (NEW)
	Also Affected	DOS Code 5314 (reference ranges only)
5311	Potassium Effective Specimen/Stability	January 11 Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days Note: Plasma heparin no longer accepted.
	Collection Instructions	Do not allow serum to remain on the cells after centrifugation. Potassium from the red cells will diffuse into the serum, giving falsely elevated results. Grossly lipemic specimens should be cleared by ultracentrifugation. Moderate and grossly hemolyzed specimens will be rejected. Transport room temperature.
	Reference Range	0 – 7 Days: 3.2 – 5.5 mmol/L (NEW) 8 – 30 Days: 3.4 – 6.0 mmol/L (NEW) 1 – 5 Months: 3.5 – 5.6 mmol/L (NEW) 6 Months – 1 Year: 3.5 – 6.1 mmol/L (NEW) 2 – 19 Years: 3.8 – 5.1 mmol/L (NEW) > 19 Years: 3.5 – 5.3 mmol/L (NEW)
	Also Affected	DOS Codes 5314, 5315, 5316, 5317 (reference ranges only)

Test Changes: (cont'd)

1324	Protein, Total	
Effective		January 11
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
		Note: Plasma Heparin is no longer accepted; decreased frozen stability.
Collection Instructions		Grossly hemolyzed and icteric specimens will be rejected. Avoid repeated freeze-thaw cycles. Transport room temperature.
Reference Range		Age: Male Female:
		0 – 30 Days: 4.1-6.3 g/dL (NEW) 4.2-6.2 g/dL (NEW)
		1 – 5 Months: 4.7-6.7 g/dL (NEW) 4.4-6.6 g/dL (NEW)
		6 - 11 Months: 5.5-7.0 g/dL (NEW) 5.6-7.9 g/dL (NEW)
		1 - 19 Years: 6.3-8.2 g/dL (NEW) 6.3-8.2 g/dL (NEW)
		> 19 Years: 6.2-8.3 mg/dL (NEW) 6.2-8.3 mg/dL (NEW)
Also Affected		DOS Codes 1580, 1580G, 1583, 1583G, 1584, 5317, 5318 (reference ranges only)
5306	Sodium	
Effective		January 11
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
		Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
		Note: Decreased frozen stability.
Collection Instructions		Grossly hemolyzed specimens will be rejected. Transport room temperature.
Reference Range		135 – 146 mmol/L (NEW)
Also Affected		DOS Codes 5314, 5315, 5316, 5317 (reference ranges only)
3346	Triglycerides	
Effective		January 11
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days, Frozen 28 days
		Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days, Frozen 28 days
		Note: Decreased ambient and frozen stability.
Collection Instructions		Patient should fast 9-12 hours prior to collection. Transport room temperature.
Always Statement		REMOVE
Reference Range		Age: Male Female:
		0 - 9 Years: 30-104 mg/dL (NEW) 33-115 mg/dL (NEW)
		10 - 14 Years: 33-129 mg/dL (NEW) 38-135 mg/dL (NEW)
		15 – 19 Years: 38-152 mg/dL (NEW) 40-136 mg/dL (NEW)
		> 19 Years: < 150 mg/dL (NEW) < 150 mg/dL (NEW)
Also Affected		DOS Codes 3445, 3454 (reference ranges only)
5319	Urea Nitrogen	
Effective		January 11
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
		Plasma Heparin 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days
		Note: Decreased frozen stability.
Collection Instructions		Grossly hemolyzed specimens will be rejected. Transport room temperature.
Methodology		Spectrophotometry (NEW)
Reference Range		Age: Male: Female:
		< 1 Month: 4-12 mg/dL (NEW) 3-17 mg/dL (NEW)
		1 – 11 Months: 2-13 mg/dL (NEW) 4-14 mg/dL (NEW)
		1 – 3 Years: 3-12 mg/dL (NEW) 3-14 mg/dL (NEW)
		4 – 19 Years: 7-20 mg/dL (NEW) 7-20 mg/dL (NEW)
		> 19 Years: 7-25 mg/dL (NEW) 7-25 mg/dL (NEW)
Also Affected		DOS Codes 5314, 5315, 5317 (reference ranges only)

Test Changes: (cont'd)

1310	Uric Acid	<p>Effective January 11</p> <p>Specimen/Stability Serum 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 7 days, Frozen 28 days Plasma Heparin 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 7 days, Frozen 28 days</p> <p>Collection Instructions Note: Decreased ambient and frozen stability. Avoid hemolysis. Avoid repeated freeze-thaw cycles. Transport room temperature.</p> <p>Reference Range</p> <table border="0"> <tr> <td>Age:</td> <td>Male</td> <td>Female:</td> </tr> <tr> <td>0 – 30 Days:</td> <td>1.5-3.9 mg/dL (NEW)</td> <td>1.5-4.6 mg/dL (NEW)</td> </tr> <tr> <td>1 – 11 Months:</td> <td>1.5-5.6 mg/dL (NEW)</td> <td>1.5-5.4 mg/dL (NEW)</td> </tr> <tr> <td>1 - 3 Years:</td> <td>2.1-5.6 mg/dL (NEW)</td> <td>1.8-5.0 mg/dL (NEW)</td> </tr> <tr> <td>4 - 6 Years:</td> <td>1.8-5.5 mg/dL (NEW)</td> <td>2.0-5.1 mg/dL (NEW)</td> </tr> <tr> <td>7 - 9 Years:</td> <td>1.8-5.4 mg/dL (NEW)</td> <td>1.8-5.5 mg/dL (NEW)</td> </tr> <tr> <td>10 – 12 Years:</td> <td>2.2-5.8 mg/dL (NEW)</td> <td>2.5-5.9 mg/dL (NEW)</td> </tr> <tr> <td>13 – 15 Years:</td> <td>3.1-7.0 mg/dL (NEW)</td> <td>2.2-6.4 mg/dL (NEW)</td> </tr> <tr> <td>16 – 18 Years:</td> <td>2.1-7.6mg/dL (NEW)</td> <td>2.4-6.6 mg/dL (NEW)</td> </tr> <tr> <td>> 19 Years:</td> <td>4.0-8.0 mg/dL (NEW)</td> <td>2.5-7.0 mg/dL (NEW)</td> </tr> </table> <p>Also Affected DOS Code 1010 (reference ranges only)</p>	Age:	Male	Female:	0 – 30 Days:	1.5-3.9 mg/dL (NEW)	1.5-4.6 mg/dL (NEW)	1 – 11 Months:	1.5-5.6 mg/dL (NEW)	1.5-5.4 mg/dL (NEW)	1 - 3 Years:	2.1-5.6 mg/dL (NEW)	1.8-5.0 mg/dL (NEW)	4 - 6 Years:	1.8-5.5 mg/dL (NEW)	2.0-5.1 mg/dL (NEW)	7 - 9 Years:	1.8-5.4 mg/dL (NEW)	1.8-5.5 mg/dL (NEW)	10 – 12 Years:	2.2-5.8 mg/dL (NEW)	2.5-5.9 mg/dL (NEW)	13 – 15 Years:	3.1-7.0 mg/dL (NEW)	2.2-6.4 mg/dL (NEW)	16 – 18 Years:	2.1-7.6mg/dL (NEW)	2.4-6.6 mg/dL (NEW)	> 19 Years:	4.0-8.0 mg/dL (NEW)	2.5-7.0 mg/dL (NEW)
Age:	Male	Female:																														
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3846	Amylase Isoenzymes	<p>Effective January 11</p> <p>Specimen/Stability Serum 2.0 (1.0) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days</p> <p>Note: Decreased frozen stability.</p>																														
1900	Apolipoprotein Evaluation	<p>Effective January 11</p> <p>Specimen/Stability Serum 2.0 (0.6) mL: Ambient 72 hours, Refrigerated 9 days, Frozen 30 days</p> <p>Note: Increased refrigerated and decreased frozen stability.</p>																														
1010	Arthritis Evaluation	<p>Effective January 11</p> <p>Specimen/Stability Serum 3.0 (1.5) mL: Ambient 24 hours, Refrigerated 7 days, Frozen 28 days</p> <p>Note: Decreased ambient and frozen stability.</p>																														
5991	Cardiovascular Thrombotic Risk AssessR™	<p>Effective January 11</p> <p>Specimen/Stability #1 Plasma Citrated 2.0 (0.5) mL: Frozen 14 days</p> <p>Specimen/Stability #2 Serum 1.0 (0.5) mL: Frozen 90 days</p> <p>Note: Deceased frozen serum stability.</p>																														
5316	Electrolyte Panel	<p>Effective January 11</p> <p>Specimen/Stability Serum 1.0 (0.5) mL: Ambient 7 days, Refrigerated 7 days, Frozen 28 days</p> <p>Note: Plasma Heparin no longer accepted; increased ambient and refrigerated stability; decreased frozen stability.</p>																														
5318	Hepatic Function Panel	<p>Effective January 11</p> <p>Specimen/Stability Serum Foil Wrapped 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 3 days Amber Tube 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 3 days</p> <p>Note: Plasma Heparin no longer accepted; frozen specimens no longer accepted; decreased refrigerated stability.</p>																														
3535	Iron Status MonitR™	<p>Effective January 11</p> <p>Specimen/Stability Serum 3.5 (1.5) mL: Refrigerated 7 days, Frozen 28 days</p> <p>Note: Ambient specimens no longer accepted; Decreased frozen stability.</p>																														

Test Changes: (cont'd)

3454	Lipid Panel	January 11
Effective		
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 48 hours, Refrigerated 7 days Plasma Heparin 1.0 (0.5) mL: Ambient 48 hours, Refrigerated 2 days	
	Note: Frozen specimens no longer accepted; increased ambient and refrigerated serum stability; increased ambient and decreased plasma stability.	
3445	Lipoprotein Electrophoresis	January 11
Effective		
Specimen/Stability	Serum 2.0 (1.0) mL: Ambient 72 hours, Refrigerated 7 days	
	Note: Decreased refrigerated stability.	
5315	Metabolic Panel, Basic	January 11
Effective		
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 4 days, Refrigerated 5 days, Frozen 28 days	
	Note: Plasma Heparin no longer accepted; increased ambient and refrigerated stability; decreased frozen stability.	
5317	Metabolic Panel, Comprehensive	January 11
Effective		
Specimen/Stability	Serum Foil Wrapped 2.0 (1.0) mL: Ambient 24 hours, Refrigerated 3 days Amber Tube 2.0 (1.0) mL: Ambient 24 hours, Refrigerated 3 days	
	Note: Plasma Heparin no longer accepted; frozen specimens no longer accepted.	
3943	PTH, Intact, including Total Calcium	January 11
Effective		
Specimen/Stability	Serum 1.5 (1.0) mL: Frozen 28 days	
Also Affected	Note: Decreased frozen stability. DOS Codes 3942, 3945	
1580	Protein Electrophoresis (PEP)	January 11
Effective		
Specimen/Stability	Serum 1.5 (1.0) mL: Refrigerated 7 days, Frozen 28 days	
Also Affected	Note: Decreased refrigerated and frozen stability. DOS Codes 1580G, 1583, 1583G, 1584	
5314	Renal Function Panel	January 11
Effective		
Specimen/Stability	Serum 1.0 (0.5) mL: Ambient 24 hours, Refrigerated 5 days, Frozen 28 days	
	Note: Increased refrigerated and decreased frozen stability.	
5990	Thrombotic Risk AssessR™	January 11
Effective		
Specimen/Stability #1	Plasma Citrated 2.0 (0.5) mL: Frozen 14 days	
Specimen/Stability #2	Serum 2.0 (1.0) mL: Ambient 48 hours, Refrigerated 14 days, Frozen 90 days	
Also Affected	Note: Deceased refrigerated and frozen serum stability. DOS Code 5973	
4102	Alcohol, Ethyl Serum	January 11
Effective		
Collection Instructions	Do not use alcohol solutions as a skin preparation for drawing specimen. Use non-alcohol solutions such as Betadine® or Zephiran®. Keep specimen tightly capped. Prevent exposure to atmosphere. Transport at room temperature.	

Test Changes: (cont'd)

4114	Carbamazepine	January 11
Effective		
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 6 days, Refrigerated 10 days, Frozen 30 days Plasma Heparin 1.0 (0.5) mL: Ambient 6 days, Refrigerated 10 days, Frozen 30 days
		Note: Plasma Heparin specimens now accepted; decreased ambient and frozen stability.
Collection Instructions		Serum separator tubes are not acceptable. Collect at trough concentrations, i.e. within 30 minutes prior to the administration of the next dose. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		4.0-12.0 mg/L (NEW UNITS)
4901	Gentamicin	January 11
Effective		
Specimen/Stability		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
		Note: Plasma Heparin and ambient specimens now accepted.
Collection Instructions		Collect as a trough just before next dose. Collect peak at the end of the a 60 minute IV infusion, 30 minutes after the end of a 30 minute IV infusion or 60 minutes after the IM dose. Serum separator tubes are not acceptable. Transport room temperature.
Methodology		Immunoassay (NEW)
Always Statement		Peak: 5.0-10.0 mg/L (NEW UNITS) Trough: 1.0-2.0 mg/L (NEW)
4901P	Gentamicin, Peak & Trough	January 11
Effective		
Specimen/Stability #1		Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability #2		Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
		Note: Plasma Heparin and ambient specimens now accepted.
Collection Instructions		Collect trough just before next dose. Collect peak at the end of the a 60 minute IV infusion, 30 minutes after the end of a 30 minute IV infusion or 60 minutes after the IM dose. Serum separator tubes are not acceptable. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		Peak: 5.0-10.0 mg/L (NEW UNITS) Trough: 1.0-2.0 mg/L (NEW)
4871	Lithium	January 11
Effective		
Collection Instructions		Do not use serum separator tubes. Serum from a Red Top tube without serum separator is acceptable. Do not use Lithium Heparin anticoagulant. The concentration of lithium in the serum varies with the time after the dose, therefore, blood for lithium determination (trough values) should be collected at a standard time, preferably 8-12 hours after the last dose. Transport room temperature.
Reference Range		0.6-1.2 mEq/L (NEW)
Always Statement		Therapeutic concentration (trough): 0.6-1.2 mEq/L Toxic concentration: Greater than 1.5 mEq/L

Test Changes: (cont'd)

4145	Phenytoin	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 10 days, Frozen 30 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 10 days, Frozen 30 days
		Plasma EDTA 1.0 (0.5) mL: Ambient 5 days, Refrigerated 10 days, Frozen 30 days
		Note: Plasma EDTA and ambient specimens now accepted; increased refrigerated and decreased frozen stability.
Collection Instructions		Collect as a trough just before next dose. For patients receiving fosphenytoin therapy, collect as a trough at least 2 hours after IV infusion or at least 4 hours after intramuscular (IM) injection. Serum separator tubes are not acceptable. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		10.0-20.0 mg/L (NEW UNITS)
Also Affected		DOS Code 4144 (reference range and method only)
4144	Phenytoin, Free & Total	January 11
Effective		Serum 1.0 (0.5) mL: Refrigerated 7 days, Frozen 30 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Refrigerated 7 days, Frozen 30 days
		Plasma EDTA 1.0 (0.5) mL: Refrigerated 7 days, Frozen 30 days
		Note: Plasma EDTA now accepted; decreased frozen stability.
Collection Instructions		Collect as a trough just before next dose. For patients receiving fosphenytoin therapy, collect as a trough at least 2 hours after IV infusion or at least 4 hours after intramuscular (IM) injection. Serum separator tubes are not acceptable. Transport room temperature.
Methodology		Total: Immunoassay (NEW) Free: FPIA (same) Bound: Calculated (same)
Reference Range		Total: 10.0-20.0 mg/L (NEW UNITS) Free: 1.00-2.00 mg/L (NEW UNITS) Bound: mg/L (NEW UNITS)
Also Affected		DOS Code 4143
4146	Primidone	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 72 hours, Refrigerated 14 days, Frozen 30 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 72 hours, Refrigerated 14 days, Frozen 30 days
		Plasma EDTA 1.0 (0.5) mL: Ambient 72 hours, Refrigerated 14 days, Frozen 30 days
		Note: Increased refrigerated stability; decreased ambient and frozen stability.
Collection Instructions		Collect as a trough just before next dose. Serum separator tubes are not acceptable. Grossly hemolyzed and lipemic specimens will be rejected. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		5.0-12.0 mg/L (NEW UNITS)
4148	Procainamide & NAPA	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days
		Plasma EDTA 1.0 (0.5) mL: Ambient 4 days, Refrigerated 7 days
		Note: Plasma EDTA and Heparin are now accepted; frozen specimens are no longer accepted; increased ambient stability.
Collection Instructions		Serum separator tubes are not acceptable. Transport refrigerated.
Methodology		Immunoassay (NEW)
Reference Range		Procainamide: 4.0-10.0 mg/L (NEW UNITS) NAPA: (REMOVE) Procainamide+NAPA: 5.0-30.0 mg/L (NEW)

Test Changes: (cont'd)

4902	Tobramycin	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Note: Plasma Heparin and EDTA specimens are now accepted; frozen specimens are no longer accepted; decreased ambient stability.
Collection Instructions		Collect as a trough just before next dose. Collect peak at the end of 60 minute IV infusion, or 30-60 minutes after IM dose. Serum separator tubes are not acceptable. Moderate to grossly lipemic specimens will be rejected. Transport room temperature.
Methodology		Immunoassay (NEW)
Always Statement		REFERENCE RANGE for Tobramycin: Peak Therapeutic Level: 5.0-10.0 mg/L (NEW UNITS) Trough Level: 1.0-2.0 mg/L
4902P	Tobramycin, Peak & Trough	January 11
Effective		Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability #1		Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability #2		Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Note: Plasma Heparin and EDTA specimens are now accepted; frozen specimens are no longer accepted; decreased ambient stability.
Collection Instructions		Collect trough just before next dose. Collect peak at the end of 60 minute IV infusion, or 30-60 minutes after IM dose. Serum separator tubes are not acceptable. Moderate to grossly lipemic specimens will be rejected. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		Peak: 5.0-10.0 mg/L (NEW UNITS) Trough: 1.0-2.0 mg/L
3360	Valproic Acid	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days, Frozen 30 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days, Frozen 30 days Plasma EDTA 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days, Frozen 30 days Note: Plasma Heparin and EDTA specimens are now accepted; increased refrigerated and decreased frozen stability.
Collection Instructions		Collect as a trough concentration, i.e., within 30 minutes of next dose. Transport room temperature.
Methodology		Immunoassay (NEW)
Reference Range		50-100 mg/L (NEW UNITS)
4903	Vancomycin	January 11
Effective		Serum 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability		Plasma Heparin 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Note: Plasma Heparin and EDTA specimens are now accepted; frozen specimens are no longer accepted; decreased ambient stability.
Collection Instructions		Collect as a trough just prior to next dose. Collect peak 1-2 hours after 60-minute IV infusion. Transport room temperature.
Methodology		Immunoassay (NEW)
Always Statement		REFERENCE RANGE for Vancomycin: Peak: 20.0-40.0 mg/L (NEW) Trough: 10.0-20.0 mg/L (NEW UNITS) Vancomycin trough concentrations should be at least 10.0 mg/L. For invasive infections or when bacterial isolates exhibit vancomycin MICs between 1-2 mcg/mL, trough concentrations of 15.0-20.0 mg/L should be considered. When MICs are > or = 2 mcg/mL, alternate therapies should be considered.

Test Changes: (cont'd)

4903P	Vancomycin, Peak & Trough
Effective	January 11
Specimen/Stability #1	Serum Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Peak 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days
Specimen/Stability #2	Serum Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma Heparin Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Plasma EDTA Trough 1.0 (0.5) mL: Ambient 5 days, Refrigerated 7 days Note: Plasma Heparin and EDTA specimens are now accepted; frozen specimens are no longer accepted; decreased ambient stability.
Collection Instructions	Collect trough just prior to next dose. Collect peak 1-2 hours after 60-minute IV infusion. Transport room temperature.
Methodology	Immunoassay (NEW)
Reference Range	Peak: 20.0-40.0 mg/L (NEW) Trough: 10.0-20.0 mg/L (NEW UNITS)
Always Statement	Vancomycin trough concentrations should be at least 10.0 mg/L. For invasive infections or when bacterial isolates exhibit vancomycin MICs between 1-2 mcg/mL, trough concentrations of 15.0-20.0 mg/L should be considered. When MICs are > or = 2 mcg/mL, alternate therapies should be considered.

The CPT Codes provided are based on AMA Guidelines and are for informational purposes only. CPT Coding is the sole responsibility of the billing party. Please direct any questions regarding CPT Coding to the payer being billed.

New Referral Tests:

The following tests are now available from Quest Diagnostics and may be referred through Specialty Laboratories.

S52269 Herpesvirus 6 DNA, Quantitative Real-Time PCR [43660]
Test performed by Focus Diagnostics

S52270 *Coccidioides* Antibody Panel, CF, ID, LA and ELISA [4480]
Test performed by Focus Diagnostics

S52273 *Coxiella burnetti* DNA, Qual PCR [47010]
Test performed by Focus Diagnostics

Please call client relations at 800-421-4449 or visit our website at www.specialtylabs.com for ordering information.

Discontinued Tests:

Effective Immediately:

S51496NY *Histoplasma* Ag Urine [34441X] [NY]
Recommended replacement: 8315UR – *Histoplasma* Antigen Urine
Test performed at Specialty Laboratories

Effective December 15:

5355 Cystic Fibrosis 40 (CF40) GenotypR™: Carrier Study
Recommended replacement: 5432 – Cystic Fibrosis 23 Mutation Analysis or 5432FH – Cystic Fibrosis 23 Mutation Analysis w/ Positive Family History
Test performed at Specialty Laboratories

5356 Cystic Fibrosis 70 (CF70) GenotypR™: Carrier Study
Recommended replacement: 5432 – Cystic Fibrosis 23 Mutation Analysis or 5432FH – Cystic Fibrosis 23 Mutation Analysis w/ Positive Family History
Test performed at Specialty Laboratories

5357 Cystic Fibrosis 70 (CF70) GenotypR™: Diagnostic Study
Recommended replacement: 5432 – Cystic Fibrosis 23 Mutation Analysis or 5432FH – Cystic Fibrosis 23 Mutation Analysis w/ Positive Family History
Test performed at Specialty Laboratories

5358 Cystic Fibrosis 70 (CF70) GenotypR™: Fetal Study w/Rfx to MCC
Recommended replacement: 5434 - Cystic Fibrosis 23 Mutation Analysis, Fetus w/Reflex MCC
Test performed at Specialty Laboratories

Effective December 28:

S50550 Aripiprazole Serum [0451S,P]
Recommended replacement: 4258 – Aripiprazole Serum/Plasma
Test performed at Specialty Laboratories

Effective January 1:

S42695 Acid Phosphatase Tartrate Resistant
No Replacement

S43170 Stool, Electron Microscopy
No Replacement

S48684 IHC HPV Screen (Wide Spectrum and Subtyping)
No Replacement

S48892 Electron Microscopy [4993]
No Replacement

Discontinued Tests: (cont'd)

- S50083 HPV by ISH, Tissue Panel [8030622]**
No Replacement
- S50084 HPV by ISH, Tissue Low Risk [8030623]**
No Replacement
- S50085 HPV by ISH, Tissue High Risk [8030624]**
No Replacement
- S50574 Congo Red Stain-IHC (Stain Only)**
No Replacement
- S50749 Amyloid A IHC Analysis – Stain Only**
No Replacement
- S51071 Lipid Laden Macrophage**
No Replacement

Effective January 11:

- 5303C Chloride CSF**
Recommended replacement: S50443 – Chloride Fluid
Test performed at ARUP Laboratories

Effective February 1:

- 5250 Occult Blood [Hemocult]**
Recommended replacement: S51000 – Fecal Globin by Immunochemistry [11290]
Test performed at Quest Diagnostics, West Hills, CA.