

As an Interpath customer who receives electronic results or sends electronic orders you may need to be notified when we update our Service Manual. Although we try to keep these changes to a minimum, laboratory medicine is an evolving industry requiring changes to our technology from time to time. Depending on the requirements of your EMR or Hospital Information System you may be required to make similar changes to your system in order to correctly process inbound electronic results and create outbound electronic orders.

If you are uncertain that you are required to update your system we recommend that you contact your vendor for more information. As your laboratory service provider we are available to participate in the discussion with your vendor so that you clearly understand the impact of these changes.

Included in this email:

- This cover letter with a summary of the changes
- Microsoft Word<sup>®</sup> Document with the detail of these changes to our Service Manual
- Interpath Master Order/Result Compendium

Additional information including our most recent Service Manual and additional contact information can be found at <u>www.interpathlab.com</u>

#### Effective Date: November 12, 2018



		NC	CC	СРТ	SRC	RRC	NT	DT	AOE
Order Code	Test Name	Name Change	Component Change	CPT Change	Specimen Requirements Change	Reference Range Change	New Test	Discontinued Test	Ask on Order Entry Questions
91026	Arsenic, Blood				•	٠			
92147	Aspergillus fumigatus Antibody, IgG				•	•			
91037	Cadmium Exposure Panel - OSHA				•				
91038	Cadmium, Blood				•				
91114	Hantavirus Antibodies, IgG/IgM							•	
91119	Heavy Metals Panel, Urine				•	•			
91118	Heavy Metals Panel, Blood				•	•			
93531	IA-2 Antibody							•	
2070	Immunofixation with Protein Electrophoresis, Serum	•							
2149	Immunofixation with Protein Electrophoresis, Urine	•							
90300	Lead, Capillary				•				
93001	Lead, Blood				•				
91306	Lead, Urine				•	•			
91262	Lipoprotein Electrophoresis			•					
91162	Mercury, Urine				•	•			
93370	Mercury, Blood				•	•			
90090	Mexiletine					•			
90099	Perphenazine, Serum or Plasma							•	
90114	Propafenone		•	•	•	♦			•
2779	Protein Electrophoresis Follow Up, Serum						•		
2780	Protein Electrophoresis Follow Up, Urine						٠		•
2075	Protein Electrophoresis with Reflex to Immunofixation, Serum	•							
2141	Protein Electrophoresis with Reflex to Immunofixation, Urine	•			•				
2147	PSA, Ultrasensitive	•							
2261	PSA, Ultrasensitive Total and Free	•			•				
2232	PSA, Ultrasensitive Total w/Free PSA Reflex	•							
93955	Sensory Neuropathy Antibody Panel		•						
2179	Testosterone					•			
5025	Testosterone, Free + Total					•			
92160	Testosterone Free LC/MS, Females or Children						•		



#### 91026 Arsenic, Blood

#### Specimen: Collect: One Royal Blue (EDTA) Submit: 6 mL (Min:0.5 mL) Whole blood in Royal Blue (EDTA). Submit Ambient. Special Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to Handling: discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physican) and avoid shellfish and seafood for 48 to 72 hours. If the specimen is drawn and stored in the appropriate container the trace element values do not change with time Rejection Clotted Specimen Criteria: Frozen whole blood Specimens collected in tubes other than Royal Blue (EDTA). Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes. Methodology: Inductively Coupled Plasma Mass Spectrophotometry Performed: Mon-Sat **Reported:** 2-4 Day(s) CPT Codes: 82175

Please take note of changes to rejection criteria and reference range. Reference range changes: 0.0-12.0 µg/L

#### 92147 Aspergillus fumigatus Antibody, IgG

SRC/RRC

SRC/RRC

Specimen:	ipecimen:		
Collect:	One SST		
	Also Acceptable One Red Top		
Submit:	0.5 mL (Min:0.2 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube.		
Special Handling:	Separate serum from cells ASAP or within 2 hours of collection		
Rejection Criteria:	a: Hemolyzed specimens Icteric specimen Lipemic Samples		
Stability:	Ambient: 2 Day(s); Refrigerated: 2 Week(s); Frozen: 12 Month(s); Incubated: Unacceptable		
Methodology:	Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay		
Performed:	Sunday		
Reported:	2-9 Day(s)		
CPT Codes:	86606		

#### Please take note of specimen requirement changes and reference range changes. Reference range changes:

<u>0.00-90.00 mcg/mL</u>: Negative - No significant level of *A. fumigatus* IgG antibody detected <u>90.01-99.99 mcg/mL</u>: Equivocal - Questionable presence of *A. fumigatus* IgG antibody <u>100.00 mcg/mL or greater</u>: Positive – *A. fumigatus* IgG antibody detected. A positive result satisfies a single criterion in the determination of allergic bronchopulmonary aspergillosis (ABPA)



#### 91037 Cadmium Exposure Panel – OSHA

Specimen:			
Collect:	One Royal Blue (EDTA)		
	Random Urine in Sterile Specimen Container		
Submit:	One 3 mL Random Urine. Submit Frozen. Submit in a Standard Transport Tube. One 5 mL (Min:0.5 mL) Random Urine in Trace Element Free Tube. Submit Refrigerated. One 2 mL (Min:0.5 mL) Random Urine. Submit Refrigerated. Submit in a Standard Transport Tube. One 6 mL (Min:0.5 mL) Whole blood in Royal Blue (EDTA). Submit Ambient.		
Special Handling:	g: the same day.		
	<ul> <li>Submit 3 aliquots for urine, labeled with test:</li> <li>1. B2 Micro - Transfer 3 mL aliquot from original urine collection to an ARUP Standard Transport Tube. Adjust the pH of this specimen immediately after pouring off collection, so the pH is between 6 and 8. Use 1M HCl or 5 percent NaOH to adjust the pH. Label tube as 2 Microglobulin. Freeze within one hour of collection.</li> <li>2. Cadmium - Transfer 7 mL aliquot from original urine collection to ARUP Trace Element-Free Transport Tubes (ARUP supply #43116). Label tube as Cadmium.</li> <li>3. Creatinine - No adjustment - refrigerate</li> </ul>		
Rejection Criteria:	Blood:Specimens collected in tubes other than Royal Blue (EDTA). Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes. Clotted specimens.Frozen whole Blood. Urine: collected within 72 hours after administration of iodinated or gadolinium-based contrast media (may occur with MRI studies). Specimens containing blood or fecal matter.		
Methodology:	Chemiluminescent Immunoassay; Immunoassay; Inductively Coupled Plasma Mass Spectrophotometry		
Performed:	Mon-Fri		
Reported:	2-6 Day(s)		
CPT Codes:	82232	82300x2	
Interpretive Data:	Please see report for interpretive data.		
Components:	93032 - CADMIUM, URINE 91038 - CADMIUM, BLOOD	93029 - CADMIUM, URINE 93218 - B2 MICROGLOBULIN	
	93173 - B2 MICROGLOBULIN 93208 - PH	93008 - CREAT, UR	

Please take note of changes to submit and rejection criteria.

SRC



#### 91038 Cadmium, Blood

SRC

Specimen:	
Collect:	One Royal Blue (EDTA)
Submit:	6 mL (Min:0.5 mL) Whole blood in Royal Blue (EDTA). Submit Ambient.
Special Handling:	Stability: If the specimen is drawn and stored in the appropriate container the trace element values do not change with time.
	Frozen whole blood Specimens collected in tubes other than Royal Blue (EDTA). Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes.
Methodology:	Inductively Coupled Plasma Mass Spectrophotometry
Performed:	Mon-Sat
Reported:	2-4 Day(s)
CPT Codes:	82300

Please take note of changes to rejection criteria.

## 91114 Hantavirus Antibodies, IgG/IgM

Test is being discontinued.

DC



#### 91119 Heavy Metals Panel, Urine

#### SRC/RRC

Specimen:			
Collect:	Timed Urine in Timed Urine Container		
	Also Acceptable Random Urine in Sterile Specimen Container		
Submit:	8 mL (Min:2 mL) Aliquot(s) Timed U	rine in Trace Element Free Tube. Submit Refrigerated.	
	Also Acceptable 8 mL (Min:2 mL) Random Urine in Trace Elem	ent Free Tube. Submit Refrigerated.	
Special Handling:	Keep Specimen Refrigerated During Collection State Collection Time State Volume Collect and submit in trace element containers Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, non-essential over-the-counter medications (upon the advice of their physician), and avoid shellfish and seafood for 48 to 72 hours. High concentrations of iodine may interfere with elemental testing. Abstinence from iodine-containing medications or contrast agents for at least 1 month prior to collecting specimens for elemental testing is recommended.		
Rejection		unction should be avoided for a minimum of 14 days post-contrast media exposure. ation of iodinated or gadolinium-based contrast media.	
Criteria:	Acid preserved urines. Specimens containing blood or fecal matter. Specimens transported in non-trace element free transport tube.		
Stability:	Ambient: 1 Week(s); Refrigerated: 2 Week(s); Frozen: 12 Month(s); Incubated: Unacceptable		
Methodology:	Quantitative Inductively Coupled Plasma-Mass	s Spectrometry	
Performed:	Sun-Sat		
Reported:	2-4 Day(s)		
CPT Codes:	82175 83825	83655	
Interpretive Data:	Please see report for interpretive data.		
Components:	93008 - CREAT, UR 93027 - ARSENIC, URINE 93033 - MERCURY, URINE 93035 - MERCURY, URINE 93037 - LEAD, URINE 93040 - LEAD, URINE 93388 - URINE VOLUME	93009 - CREATININE 93028 - ARSENIC, URINE 93034 - MERCURY, URINE 93036 - ARSENIC, UR 93038 - LEAD, URINE 93518 - HOURS COLLECTED	

#### Please take note of changes to specimen requirements and reference ranges. Reference range changes:

<u>Lead, Urine - per volume:</u> 0.0-5.0 μg/L <u>Lead Urine - ratio to CRT:</u> 0.0-5.0 ug/g CRT <u>Mercury, Urine - per volume:</u> 0.0-5.0 μg/L <u>Mercury, Urine - per 24hr:</u> 0.0-20.0 μg/d



#### 91118 Heavy Metals Panel, Blood

#### SRC/RRC

Specimen:			
Collect:	One Royal Blue (EDTA)		
Submit:	6 mL (Min:0.5 mL) Whole blood. Submit Ambient.		
Special Handling:	Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be en to discontinue nutritional supplements, vitamins, minerals, non-essential over-the-counter medications (upon the advice physician), and avoid shellfish and seafood for 48 to 72 hours.		
	Stability (collection to initiation of testing): Mercury is volatile; concentration may reduce after seven or more days of storage. If th specimen is drawn and stored in the approprate container, the arsenic, cadmium, and lead values do not change with time.		
Rejection	Clotted Specimen		
Criteria:	Heparin Anticoagulant		
	Specimens collected in tubes other than Royal Blue (EDTA). Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes.		
Stability:	Ambient: 1 Week(s); Refrigerated: 1 Week(s); Frozen: Unacceptable; Incubated: Unacceptable		
Methodology:	Quantitative Atomic Absorption/Quantitative Induct	ively Coupled Plasma-Mass Spectrometry	
Performed:	Monday, Wednesday, Thursday, Friday, Saturday		
Reported:	2-5 Day(s)		
CPT Codes:	82175	82300	
	83655	83825	
Interpretive Data:	Please see report for interpretive data.		
Components:	93001 - LEAD, BLOOD	93370 - MERCURY, BLOOD	
-	91026 - ARSENIC, BLOOD	91038 - CADMIUM, BLOOD	

#### Please take note of changes to specimen requirements and reference ranges. Reference range changes:

Arsenic, Blood: 0.0-12.0 µg/L

Mercury, Whole Blood: 0.0-10.0 µg/L

#### 93531 IA-2 Antibody Test is being discontinued.

DC



NC

#### 2070 Immunofixation with Serum Protein Electrophoresis

One SST	
	t Defrigerated Submit in a Standard Transport Tube
	and Immunofixation with a Pathologist' Interpretation.
Ambient: 8 Hour(s); Refrigerated: 1 Week	(s); Frozen: 1 Month(s); Incubated: Unacceptable
Colorimetric; Electrophoresis; Turbidimetri	ic
Mon-Fri	
2-5 Day(s)	
84155	84165
86334	82784x3
Please see report for interpretive data.	
1044 - PROTEIN	2441 - % ALBUMIN
2427 - ALBUMIN	2442 - % ALPHA 1
2428 - ALPHA 1	2443 - % ALPHA 2
2429 - ALPHA 2	2444 - % BETA
2430 - BETA	2325 - IMMUNOGLOBULIN G
2326 - IMMUNOGLOBULIN A	2327 - IMMUNOGLOBULIN M
2115 - % GAMMA	
	Also Acceptable One Red Top <b>1 mL (Min:0.5 mL) Serum. Submi</b> Includes Fractionalization of Total Protein Grossly Hemolyzed Samples Ambient: 8 Hour(s); Refrigerated: 1 Week Colorimetric; Electrophoresis; Turbidimetri Mon-Fri 2-5 Day(s) 84155 86334 <b>1</b> Please see report for interpretive data. 1044 - PROTEIN 2427 - ALBUMIN 2428 - ALPHA 1 2429 - ALPHA 2 2430 - BETA

Name changed indicating that protein electrophoresis is performed with the immunofixation.



NC

#### 2149 Immunofixation with Urine Protein Electrophoresis

Specimen:			
Collect:	Timed Urine in Timed Urine Container Also Acceptable		
	Random Urine in Sterile Specimen Contain	er	
Submit:	20 mL (Min:15 mL) Aliquot(s) Time	ed Urine in Sterile Specimen Container. Submit Refrigerated.	
	Also Acceptable		
	20 mL (Min:15 mL) Random Urine in Sterile	e Specimen Container. Submit Refrigerated.	
Special Handling:	24 HR Urine Collection Preferred		
	Keep Specimen Refrigerated During Collection		
	State Volume		
	When collecting random void, first morning	• •	
Stability:	Ambient: 2 Hour(s); Refrigerated: 1 Week(s	); Frozen: 1 Month(s); Incubated: Unacceptable	
Methodology:	Colorimetric; Electrophoresis		
Performed:	Mon-Fri		
Reported:	2-5 Day(s)		
CPT Codes:	84156	84166	
	86335		
Interpretive Data	a: Please see report for interpretive data.		
Components:	1046 - PROTEIN, URINE	2129 - ALBUMIN	
-	2132 - ALPHA-1 GLOB.	2134 - ALPHA-2 GLOB.	
	2136 - BETA GLOB.	2139 - GAMMA GLOB.	
	2145 - CONCENTRATED	2490 - VOLUME (ML)	
	2491 - HRS OF COLLECTION	5891 - INTERP	
	· · · · · · · · · · · · · · · · · · ·	leatrankereals is performed with the	

Name changed indicating that protein electrophoresis is performed with the immunofixation.



### 90300 Lead, Capillary

#### SRC

Specimen:		
Collect:	One Lavender (EDTA)	
Submit:	0.5 mL (Min:0.3 mL) Whole blood in Lavender (EDTA) Micro. Submit Ambient.	
Special Handling:	Patient Preparation: Clean puncture site well with soap and water before collection procedure begins. Specimen Preparation: Invert specimen 10 times to prevent clot formation. Stability: If the specimen is drawn and stored in the appropriate container, the lead values do not change with time.	
Rejection Criteria:	Frozen Whole Blood Heparin Anticoagulant Specimens collected in tubes other than Lavender Pediatric(EDTA). Specimens transported in containers other than Lavender Pediatric (EDTA) or Trace Element-Free transport tubes. Venous whole blood	
lethodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry	
Performed:	Sun-Sat	
Reported:	2-3 Day(s)	
CPT Codes:	83655	

## Please take note of changes to rejection criteria.

#### 93001 Lead, Blood

SRC

Specimen:	
Collect:	One Royal Blue (EDTA)
Submit:	6 mL (Min:0.5 mL) Whole blood in Royal Blue (EDTA). Submit Ambient.
Special Handling:	Stability: If the specimen is drawn and stored in the appropriate container, the trace element values do not change with time. Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable
Rejection Criteria:	Clotted Specimen Heparinized specimens Serum Specimens collected in tubes other than Royal Blue (EDTA). Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes.
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry
Performed:	Sun-Sat
Reported:	2-3 Day(s)
CPT Codes:	83655

Please take note of changes to rejection criteria.



#### 91306 Lead, Urine

#### SRC/RRC

Specimen:				
Collect:	Timed Urine in Timed Urine Container			
	Also Acceptable Random Urine in Sterile Specimen Container			
Submit:	8 mL (Min:1 mL) Aliquot(s) Timed Urine in Sterile Specimen Container. Submit Refrigerated. Submit in a Standard Transport Tube.			
	Also Acceptable 8 mL (Min:1 mL) Random Urine in Sterile Specimen Container. Submit Refrigerated.			
Special Handling:	24 HR Urine Collection Preferred Keep Specimen Refrigerated During Collection State Collection Time State Volume Use plastic container and refrigerate during collection.			
	Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). High concentrations of iodine may interfere with elemental testing. Abstinence from iodine-containing medication or contrast agents for at least 1 month prior to collecting specimens for elemental testing is recommended.			
	Collect: 24-hour or random urine collection. Refrigeration of urine alone, during and after collection, preserves specimens adequately, if tested within 14 days of collection.			
Rejection Criteria:	Acid Preserved Urine Urine collected within 72 hours after administration of idodinated or gadolinium-based contrast media. Specimens transported in non-trace element free transport tube (with the exception of the original device).			
Stability:	Ambient: 1 Week(s); Refrigerated: 2 Week(s); Frozen: 12 Month(s); Incubated: Unacceptable			
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry			
Performed:	Mon-Sat			
Reported:	2-4 Day(s)			
CPT Codes:	83655			
Interpretive Data:	Please see report for interpretive data.			
Components:	93040 - LEAD, URINE         93008 - CREAT, UR           93009 - CREATININE         93518 - HOURS COLLECTED			
	93388 - URINE VOLUME			

## Please take note of changes to rejection criteria and reference ranges. Reference range changes:

<u>Lead, Urine - per volume:</u> 0-5.0 µg/L <u>Lead Urine - ratio to CRT:</u> 0.0-5.0 ug/g CRT



CPT

#### 91262 Lipoprotein Electrophoresis

Specimen:			
Collect:	One SST		
	Also Acceptable One Red Top		
Submit:	1 mL (Min:0.5 mL) Serum. Submit	Refrigerated. Submit in a Standard Transport Tube.	
Special Handling:	Fasting 12-15 hours required		
Rejection Criteria:	Grossly Hemolyzed Samples		
Stability:	Ambient: 24 Hour(s); Refrigerated: 10 Day(s); Frozen: Unacceptable; Incubated: Unacceptable		
Methodology:	Qualitative Electrophoresis/Quantitative Enzymatic/Detergent Solubilization		
Performed:	Thursday		
Reported:	2-9 Day(s)	2-9 Day(s)	
CPT Codes:	83700; 80061		
Interpretive Data	Please see report for interpretive data.		
Components:	93541 - CHOLESTEROL	93542 - TRIGLYCERIDE	
-	93543 - HDL	93544 - LDL, DIRECT	
	93546 - APPEARANCE	93547 - VLDL, CALC	
	93548 - INTERPRETATION		

Please take note of change to CPT. CPT Changes: <u>Add:</u> 80061.



#### 91162 Mercury, Urine

#### SRC/RRC

Timed Urine in Timed Urine Container		
Also Acceptable Random Urine in Sterile Specimen Container		
•	n Trace Element Free Tube. Submit Refrigerated.	
Also Acceptable 8 mL (Min:1 mL) Random Urine in Trace Element Free Tube. Submit Refrigerated.		
<ul> <li>24 HR Urine Collection Preferred Keep Specimen Refrigerated During Collection State Collection Time State Volume Transfer an 8 mL aliquot from a well-mixed collection to ARUP Trace Element-Free Transport Tubes.</li> <li>Patient Preparation: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician), and avoid shellfish and seafood for 48 to 72 hours. High concentrations of iodine may interfere with elemental testing.</li> <li>Collection from patients with impaired kidney function should be avoided for a minimum of 14 days post-contrast media exposure</li> </ul>		
		Urine collected within 72 hours after administration of iodinated or gadolinium-based contrast media. Acid preserved urine. Specimens contaminated with blood or fecal material. Specimens transported in non-trace element free transport tube (with the exception of the original device).
Ambient: 1 Week(s); Refrigerated: 2 Week(s); Frozen: 12 Month(s); Incubated: Unacceptable		
Quantitative Inductively Coupled Plasma-Mass Spectrometry		
Mon-Sat		
2-4 Day(s)		
83825		
Please see report for interpretive data.		
93008 - CREAT, UR 93033 - MERCURY, URINE 93035 - MERCURY, URINE 93388 - URINE VOLUME	93009 - CREATININE 93034 - MERCURY, URINE 93518 - HOURS COLLECTED	
	Also Acceptable Random Urine in Sterile Specimen Container <b>8 mL (Min:1 mL) Aliquot(s) Timed Urine i</b> Also Acceptable 8 mL (Min:1 mL) Random Urine in Trace Element Fir 24 HR Urine Collection Preferred Keep Specimen Refrigerated During Collection State Collection Time State Volume Transfer an 8 mL aliquot from a well-mixed collectio Patient Preparation: Diet, medication, and nutritiona encouraged to discontinue nutritional supplements, advice of their physician), and avoid shellfish and se elemental testing. Collection from patients with impaired kidney functio Urine collected within 72 hours after administration of Specimens contaminated with blood or fecal materia exception of the original device). Ambient: 1 Week(s); Refrigerated: 2 Week(s); Froze Quantitative Inductively Coupled Plasma-Mass Spect Mon-Sat 2-4 Day(s) 83825 Please see report for interpretive data. 93008 - CREAT, UR 93033 - MERCURY, URINE 93035 - MERCURY, URINE	

## Please take note of changes to special handling and reference ranges. Reference range changes:

<u>Mercury, Urine - per volume</u>: 0.0-5.0 µg/L <u>Mercury, Urine - per 24hr:</u> 0.0-20.0 µg/d



#### 93370 Mercury, Blood

#### SRC/RRC

Specimen:			
Collect:	One Royal Blue (EDTA) 6 mL (Min:0.5 mL) Whole blood in Royal Blue (EDTA). Submit Ambient.		
Submit:			
Special Handling:	Specimen Preparation: Transport 7 mL whole blood in the original collection tube. (Min: 1 mL)		
	Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician), and avoid shellfish and seafood for 48 to 72 hours.		
	Stability (collection to initiation of testing): Mercury is volatile; concentration may reduce after seven or more days of storage.		
Rejection	Clotted Specimen		
Criteria:	Heparinized specimens		
	Specimen submitted frozen		
	Specimens collected in tubes other than Royal Blue (EDTA).		
	Specimens transported in containers other than Royal Blue (EDTA) or Trace Element-Free transport tubes.		
Stability:	Ambient: 1 Week(s); Refrigerated: 2 Week(s); Frozen: Unacceptable; Incubated: Unacceptable		
Methodology	Quantitative Atomic Absorption; Quantitative Inductively Coupled Plasma-Mass Spectrometry		
Performed:	Sun-Sat		
Reported:	2-4 Day(s)		
CPT Codes:	83825		

Please take note of changes to specimen requirements and reference ranges. Reference range change:  $0.0-10.0 \ \mu g/L$ 



90090 Me	Mexiletine		
Specimen:			
Collect:	One Red Top		
	Also Acceptable		
	One Lavender (EDTA)		
	One Pink Top (EDTA)		
Submit:	1 mL (Min:0.5 mL) Serum. Subm	it Refrigerated. Submit in a Standard Transport Tube.	
	Also Acceptable		
	1 mL (Min:0.5 mL) Plasma. Submit Refrie	gerated. Submit in a Standard Transport Tube.	
Special Handling:	Special Handling: Separate from cells within 2 hours of collection		
	Please indicate in the supplied fields:		
<ol> <li>Dose - List drug amount and include the units of measure</li> <li>Route - List the route of administration (IV, oral, etc.)</li> <li>Dose Frequency - Indicate how often the dose is administered (per day, per week, as need</li> </ol>			
	4. Type of Draw - Indicate the type of blood draw (Peak, Trough, Random, etc.)		
Rejection Criteria:			
	Whole blood		
Stability:	Ambient: 2 Day(s); Refrigerated: 5 Day(s); Frozen: 2 Month(s); Incubated: Unacceptable		
Methodology:	Quantitative Liquid Chromatography-Tandem Mass Spectrometry		
Performed:	Tuesday, Thursday, Saturday		
Reported:	2-6 Day(s)		
CPT Codes:	80299		
Interpretive Data	a: Please see report for interpretive data.		
Components:	90091 - MEXILETINE	90092 - DOSE	
-	90093 - ROUTE	90094 - DOSE FREQUENCY	
	90095 - TYPE OF DRAW		
N			

Please take note of changes to reference range. Reference range changes: 0.5-2.0 µg/mL



# 90099 Perphenazine, Serum or Plasma Test is being discontinued.

#### 90114 Propafenone

#### CC/AOE/SRC/RRC/CPT

DC

Specimen:			
Collect:	One Red Top		
	Also Acceptable One Lavender (EDTA) One Pink Top (EDTA)		
Submit:	2 mL (Min:0.7 mL) Serum. Submit Refrigerated.		
	Also Acceptable 2 mL (Min:0.7 mL) Plasma. Submit Refrigerated.		
	Separate from cells within 2 hours of collection Please indicate in the supplied fields: 1. Dose - List drug amount and include the units of measure		
	<ol> <li>Route - List the route of administration (IV, oral, etc.)</li> <li>Dose Frequency - Indicate how often the dose is administered (per day, per week, as needed, etc.)</li> <li>Type of Draw - Indicate the type of blood draw (Peak, Trough, Random, etc.)</li> </ol>		
Rejection Criteria:	Separator tubes.		
Stability:	Ambient: 2 Week(s); Refrigerated: 2 Week(s); Frozen: 8 Month(s); Incubated: Unacceptable		
Methodology:	Quantitative High Performance Liquid Chromatography		
Performed:	Varies		
Reported:	4-10 Day(s)		
CPT Codes:	82542, 80375		
Interpretive Data:	Please see report for interpretive data.		
Components:	90115 - PROPAFENONE 90116 - TYPE OF DRAW		
-	90117 - ROUTE 90118 - DOSE FREQUENCY		
	<del>90119 - DOSE</del>		

Please take note of changes to components, ask on order entry questions, specimen requirements, reference range, and CPT coding. CPT changes:

Remove: 82542

<u>Add:</u> 80375

**Component changes:** <u>Remove:</u> 90115 PROPAFENONE, 90116 TYPE OF DRAW, 90117 ROUTE, 90118 DOSE FREQUENCY, 90119 DOSE

(All components are being removed, this test will order and result under test number 90114)

Ask on Order Entry questions changes: <u>Remove:</u>1124 Dose, 1125 Route, 1126 Dose Frequency, 1127 Type of Draw

(All Ask on Order Entry questions are being removed)

Reference range: By Report



NT

#### 2779 Protein Electrophoresis Follow Up, Serum

Specimen:			
Collect:	One SST		
	Also Acceptable One Red Top		
Submit:	1 mL (Min:0.5 mL) Serum. Submit Refrig	erated. Submit in a Standard Transport Tube.	
Special Handling:	This test is for the continued monitoring of previously identified M-spikes and/or other abnormalities. If abnormalities are still present, no reflex to Immunofixation will occur.		
Rejection Criteria:	Grossly Hemolyzed Samples		
Stability:	Ambient: 8 Hour(s); Refrigerated: 1 Week(s); Frozen: 1 Month(s); Incubated: Unacceptable		
Methodology:	Colorimetric; Electrophoresis		
Performed:	Mon-Fri		
Reported:	2-5 Day(s)		
Interpretive	Please see report for interpretive data.		
Data:			
Components:	1044 - PROTEIN	2441 - % ALBUMIN	
•	2427 - ALBUMIN	2442 - % ALPHA 1	
	2428 - ALPHA 1	2443 - % ALPHA 2	
	2429 - ALPHA 2	2444 - % BETA	
	2430 - BETA	2445 - % GAMMA	
	2425 - GAMMA	5883 - INTERP	

New Test option. This test is for the continued monitoring of previously identified Mspikes and/or other abnormalities. If abnormalities are still present, no reflex to Immunofixation will occur.



#### 2780 Protein Electrophoresis Follow Up, Urine

NT/AOE

Timed Urine in Timed Urine Container		
Also Acceptable		
Random Urine in Sterile Specimen Container		
10 mL (Min:6 mL) Aliquot(s) Timed Urine in Sterile Specimen Container. Submit Refrigerated.		
24 HR Urine Collection Preferred		
Keep Specimen Refrigerated During Collection		
This test is for the continued monitoring of previously identified M-spikes and/or other abnormalities. If abnormal		
Ambient: 2 Hour(s); Refrigerated: 1 Week(s); Frozen: 1 Month(s); Incubated: Unacceptable		
Mon-Fri		
2-5 Day(s)		
Please see report for interpretive data.		
2129 - ALBUMIN	2132 - ALPHA-1 GLOB.	
2134 - ALPHA-2 GLOB.	2136 - BETA GLOB.	
2139 - GAMMA GLOB.	2490 - VOLUME (ML)	
2491 - HRS OF COLLECTION	5893 - INTERP	
1046 - PROTEIN, URINE	2145 - CONCENTRATED	
	10 mL (Min:6 mL) Aliquot(s) Timed Urin         Also Acceptable         10 mL (Min:6 mL) Random Urine in Sterile Specime         24 HR Urine Collection Preferred         Keep Specimen Refrigerated During Collection         State Volume         Minimum Volume May be insufficient if Total Prote         This test is for the continued monitoring of previou         present, no reflex to Immunofixation will occur.         Ambient: 2 Hour(s); Refrigerated: 1 Week(s); Froz         Colorimetric; Electrophoresis         Mon-Fri         2-5 Day(s)         Please see report for interpretive data.         2129 - ALBUMIN         2134 - ALPHA-2 GLOB.         2139 - GAMMA GLOB.         2491 - HRS OF COLLECTION	

New Test option. This test is for the continued monitoring of previously identified Mspikes and/or other abnormalities. If abnormalities are still present, no reflex to Immunofixation will occur.

Ask on Order Entry Questions: 1001 Total Volume, 1002 Hours of Collection



NC

#### 2075 Protein Electrophoresis, Serum with Reflex to Immunofixation

Specimen:			
Collect:	One SST Also Acceptable		
Submit:	One Red Top	mit in a Ctandard Transport Tuba	
	1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Sub	-	
Special Handling:	Reflex to Immunofixation will occur on a new accession in the cases of Hypergammaglobulinemia, the presence of an M-spike(s) in the beta or gamma regions, Beta-2 density equal to or greater than beta-1 density, beta-gamma bridging, or per pathologist's indication. Additional charges will apply.		
Rejection Criteria:	Grossly Hemolyzed Samples		
Stability:	Ambient: 8 Hour(s); Refrigerated: 1 Week(s); Frozen: 1 Month(s); Incubated: Unacceptable		
Methodology:	Colorimetric; Electrophoresis		
Performed:	Mon-Fri		
Reported:	2-5 Day(s)		
CPT Codes:	84155	84165	
Interpretive Data:	Please see report for interpretive data.		
Components:	1044 - PROTEIN	2441 - % ALBUMIN	
•	2427 - ALBUMIN	2442 - % ALPHA 1	
	2428 - ALPHA 1	2443 - % ALPHA 2	
	2429 - ALPHA 2	2444 - % BETA	
	2430 - BETA	2445 - % GAMMA	
	2425 - GAMMA	5883 - INTERP	

Please take note of name change reflecting new reflexing behavior described in special handling.

**Reflex behavior:** Reflex to Immunofixation will occur on a new accession in the cases of Hypergammaglobulinemia, the presence of an M-spike(s) in the beta or gamma regions, Beta-2 density equal to or greater than beta-1 density, beta-gamma bridging, or per pathologist's indication. Additional charges will apply.



#### 2141 Protein Electrophoresis, Urine with Reflex to Immunofixation SRC/NC

Specimen:			
Collect:	Timed Urine in Timed Urine Container		
	Also Acceptable		
	Random Urine in Sterile Specimen Container		
Submit:	20 mL (Min:15 mL) Aliquot(s) Timed Urine. Submit Refrigerated.		
	Also Acceptable		
	20 mL (Min:15 mL) Random Urine. Submit Refrigerated.		
Special	24 HR Urine Collection Preferred		
Handling:	Keep Specimen Refrigerated During Collection		
	State Volume		
	Minimum volume may be insufficient if Total Protein level is low.		
	Reflex to Immunofization will occur on a new accession in the	ases of Hypergammaglobulinemia, the presence of an M-spike(s)	
	Reflex to Immunofixation will occur on a new accession in the cases of Hypergammaglobulinemia, the presence of an M-spike(s) in the beta or gamma regions, Beta-2 density equal to or greater than beta-1 density, beta-gamma bridging, or per pathologist's indication. Additional charges will apply.		
Stability:	Ambient: 2 Hour(s); Refrigerated: 1 Week(s); Frozen: 1 Month(s); Incubated: Unacceptable		
Methodology:	Colorimetric; Electrophoresis		
Performed:	Mon-Fri		
Reported:	2-5 Day(s)		
CPT Codes:	84156	84166	
Interpretive	Please see report for interpretive data.		
Data:			
Components:	2129 - ALBUMIN	2132 - ALPHA-1 GLOB.	
•	2134 - ALPHA-2 GLOB.	2136 - BETA GLOB.	
	2139 - GAMMA GLOB.	2490 - VOLUME (ML)	
	2491 - HRS OF COLLECTION	5893 - INTERP	
	1046 - PROTEIN, URINE	2145 - CONCENTRATED	
	, note of nome change reflecting you	, raflasting babastar decerting the state	

Please take note of name change reflecting new reflexing behavior described in special handling, and changes to submit requirements.

**Reflex behavior:** Reflex to Immunofixation will occur on a new accession in the cases of Hypergammaglobulinemia, the presence of an M-spike(s) in the beta or gamma regions, Beta-2 density equal to or greater than beta-1 density, beta-gamma bridging, or per pathologist's indication. Additional charges will apply.



#### 2147 PSA, Ultrasensitive

Specimen: Collect: One SST Also Acceptable One Green Top (Li Heparin) One Lavender (EDTA) One Pink Top (EDTA) One Red Top Submit: 1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube. Also Acceptable 1 mL (Min:0.5 mL) Plasma. Submit Refrigerated. Submit in a Standard Transport Tube. Special Allow specimen to clot completely at room temperature Handling: Avoid Repeated Freeze/Thaw Cycles Minimize air exposure Separate from cells ASAP For patients receiving therapy with high biotin doses (>5 mg/day), no laboratory test specimen should be collected until at least 8 hours after the last biotin administration. Testing is equivalent to Total PSA, Results below 1.0 ng/mL will report out to the thousandths decimal place. Stability: Ambient: 2 Hour(s); Refrigerated: 5 Day(s); Frozen: 6 Month(s); Incubated: Unacceptable Methodology: Electrochemiluminescence Immunoassay (ECLIA) Performed: Mon-Fri Reported: 1-3 Day(s) CPT Codes: 84153 Interpretive General Reference Range : 0.0-4.0 ng/ml Data: The Roche e601 PSA electrochemiluminescent immunoassay is the test methodology used. Results obtained with different assay methods or kits cannot be used interchangeably. The Roche e601 PSA method is approved for use as an aid in the detection of prostate cancer when used in conjunction with a digital rectal exam in men age 50 and older. The Roche e601 PSA is also indicated for the serial measurement of PSA to aid in the prognosis and management of prostate cancer patients. Elevated PSA concentrations can only suggest the presence of prostate cancer until biopsy is performed. PSA concentrations can also be elevated in benign prostatic hyperplasia or inflammatory conditions of the prostate. PSA is generally not elevated in healthy men or men with non-prostatic carcinoma. Biotin in specimens taken from patients on high-dose biotin therapy or supplements may intefere with this test and cause inaccurate test results. It is recommended that for patients receiving therapy with high biotin doses (> 5 mg/day), no laboratory test specimen should be collected until at least 8 hours after the last biotin administration.

## Name changed indicating sensitivity of testing. Results below 1.0 ng/mL will report out to the thousandths decimal place.

NC



#### 2261 PSA, Ultrasensitive Total and Free

SRC/NC

Specimen:			
Collect:	One SST		
	Also Acceptable		
	One Green Top (Li Heparin)		
	One Red Top		
Submit:	1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube.		
	Also Acceptable		
	1 mL (Min:0.5 mL) Plasma. Submit Refrigerated. Submit in a Standard Transport Tube.		
Special	Allow specimen to clot completely at room temperature		
Handling:	Avoid Repeated Freeze/Thaw Cycles		
	Minimize air exposure		
	Separate from cells ASAP		
	For patients receiving therapy with high biotin doses (>5 mg/day), no laboratory test specimen should be collected until at least 8		
	hours after the last biotin administration.		
	Ultrasensitive portion is equivalent to Total PSA, Results below 1.0 ng/mL will report out to the thousandths decimal place.		
Rejection	Grossly Hemolyzed Samples		
Criteria:			
Stability:	Ambient: 2 Hour(s); Refrigerated: 5 Day(s); Frozen: 3 Month(s); Incubated: Unacceptable		
Methodology:	Electrochemiluminescence Immunoassay (ECLIA)		
Performed:	Mon-Fri		
Reported:	1-3 Day(s)		
CPT Codes:	84153 84154		
Interpretive	Please see report for interpretive data.		
Data:			
Components:	2147 - PSA, ULTRASENS 2247 - FREE PSA		
	2248 - % FREE PSA		

Please not changes to special handling, stability, and test name. Name changed to indicate sensitivity of testing. Results for PSA, Ultrasensitive below 1.0 ng/mL will report out to the thousandths decimal place.



NC

#### 2232 PSA, Ultrasensitive Total w/Free PSA Reflex

Specimen:			
Collect:	One SST		
	Also Acceptable One Green Top (Li Heparin) One Red Top		
Submit:	1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube.		
	Also Acceptable 1 mL (Min:0.5 mL) Plasma. Submit Refrigerated. Submit in a Standard Transport Tube.		
Special Handling:	Allow specimen to clot completely at room temperature Avoid freeze and thaw cycles. For patients receiving therapy with high biotin doses (>5 mg/day), no laboratory test specimen should be collected until at least 8 hours after the last biotin administration. Minimize air exposure Separate from cells ASAP If the PSA is abnormal, then the PSA, Free and % Free (test# 2233) test will be performed. Additional charges will apply. Testing is equivalent to Total PSA, Results below 1.0 ng/mL will report out to the thousandths decimal place.		
Rejection Criteria:	Grossly Hemolyzed Samples		
Stability:	Ambient: 2 Hour(s); Refrigerated: 5 Day(s); Frozen: 3 Month(s); Incubated: Unacceptable		
Methodology:	Electrochemiluminescence Immunoassay (ECLIA)		
Performed:	Mon-Fri		
Reported:	1-3 Day(s)		
CPT Codes:	84153 84154		
Interpretive Data:	Please see report for interpretive data.		
Components:	2147 - PSA, TOTAL         2247 - FREE PSA           2248 - % FREE PSA         2247 - FREE PSA		

Name changed to indicate sensitivity of testing. Results below 1.0 ng/mL will report out to the thousandths decimal place.



CC

#### 93955 Sensory Neuropathy Antibody Panel

Specimen:		
Collect:	One SST	
	Also Acceptable One Red Top	
Submit:	2 mL (Min:1 mL) Serum. Submit Refrig	gerated. Submit in a Standard Transport Tube.
Rejection Criteria:	Bacterially Contaminated Samples Body fluid Hemolyzed specimens Icteric specimen Lipemic Samples	
Stability:	Ambient: 1 Day(s); Refrigerated: 2 Week(s); Frozen: 24 Month(s); Incubated: Unacceptable	
Methodology:	Qualitative Immunoblot; Semi-Quantitative Enzyme-Linked Immunosorbent Assay ; Semi-Quantitative Indirect Fluorescent Antibody	
Performed:	Varies	
Reported:	3-10 Day(s)	
CPT Codes:	86255	83516x2
nterpretive Data:	Please see report for interpretive data.	
Components:	93292 - SGPG IgM ANTIBODY	91566 - MAG ANTIBODY
-	93286 - PURKINJE CELL AB	91657 – PARANEOPLASTIC ABS

## Please take note of changes to components.

**Component changes:** 

Add: 91657 - PARANEOPLASTIC ABS Remove: 93286 - PURKINJE CELL AB



RRC

#### 2179 Testosterone

Specimen:				
Collect:	One SST			
	Also Acceptable			
	One Green Top (Li Heparin)			
	One Lavender (EDTA)			
	One Pink Top (EDTA)			
	One Red Top			
Submit:	1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube.			
	Also Acceptable			
	1 mL (Min:0.5 mL) Plasma. Submit Refrigerated. Submit in a	Standard Transport Tube.		
Special	Allow specimen to clot completely at room temperature			
Handling:	Avoid Repeated Freeze/Thaw Cycles			
	hours after the last biotin administration.	day), no laboratory test specimen should be collected until at least 8		
	Minimize air exposure			
	Separate from cells ASAP			
	Specimen should be collected between 6-10 a.m.			
Stability:	Ambient: 8 Hour(s); Refrigerated: 1 Week(s); Frozen: 6 Mont	h(s); Incubated: Unacceptable		
Methodology	Electrochemiluminescence Immunoassay (ECLIA)			
Performed:	Mon-Fri			
Reported:	1-3 Day(s)			
CPT Codes:	84403			
Interpretive				
Data:	Male Reference Ranges	Female Reference Ranges		
	0 – 10 year(s) : <12-20 ng/dl	0 - 10 year(s) : <12 ng/dl		
	10 - 15 year(s) : <12-770 ng/dl 10 - 15 year(s) : <12 -60 ng/dl			
	15 - 20 year(s) : 100-1070 ng/dl	15 - 20 year(s) : <12 -70 ng/dl		
	20 - 49 year(s) : 180-917 ng/dl	20 – 50 year(s) : <12 -51 ng/dl		
	50 - 150 year(s) : 164-866 ng/dl 50 - 150 year(s) : <12 -41 ng/dl			
	Biotin in specimens taken from patients on high-dose biotin the			
	inaccurate test results. It is recommended that for patients re test specimen should be collected until at least 8 hours after	ceiving therapy with high biotin doses (> 5 mg/day), no laboratory		

Please take note of changes to reference range.



RRC

#### 5025 Testosterone, Free + Total

Specimen: Collect: One SST Also Acceptable One Green Top (Li Heparin) One Lavender (EDTA) One Pink Top (EDTA) One Red Top Submit: 1 mL (Min:0.5 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube. Also Acceptable 1 mL (Min:0.5 mL) Plasma. Submit Refrigerated. Submit in a Standard Transport Tube. Special Allow specimen to clot completely at room temperature Handling: Avoid Repeated Freeze/Thaw Cycles Minimize air exposure Separate from cells ASAP Specimen should be collected between 6-10 a.m. For patients receiving therapy with high biotin doses (>5 mg/day), no laboratory test specimen should be collected until at least 8 hours after the last biotin administration. Stability: Ambient: 8 Hour(s); Refrigerated: 3 Day(s); Frozen: 1 Month(s); Incubated: Unacceptable Methodology: Electrochemiluminescence Immunoassay (ECLIA) Performed: Mon-Fri 1-3 Day(s) Reported: The concentration of free testosterone is derived from a mathematical expression based on the constant for the binding of testosterone to sex hormone binding globulin. CPT Codes: 84270 84403 Interpretive Please see report for interpretive data. Data: 2179 - TESTOSTERONE Components: 5020 - FREE TESTOSTERONE 5023 - %FREE TESTO 5024 - SEX HB GLOBULIN 1021 - ALBUMIN

## Please take note of changes to reference ranges. Reference range changes:

2179 Testosterone:

Male		Female	
0 - 10 years	<12-20 ng/dL	0 - 10 years	<12 ng/dL
10 - 15 years	<12-770 ng/dL	10 - 15 years	<12-60 ng/dL
15 – 20 years	100-1070 ng/dL	15 – 20 years	<12-70 ng/dL
20 – 50 years	180-917 ng/dL	20 – 50 years	<12-51 ng/dL
50+ years	164-866 ng/dL	50+ years	<12-41 ng/dL

#### 5020 Free Testosterone:

Male		Female	
0 - 10 years	0.0-0.36 ng/dL	0 - 10 years	0.0-0.6 ng/dL
10 - 15 years	0.03-13.3 ng/dL	10 - 15 years	0.04-1.5 ng/dL
15 – 20 years	3.1-17.8 ng/dL	15 – 20 years	0.08-1.6 ng/dL
20 – 50 years	3-24.4 ng/dL	20 – 50 years	0.05-1.2 ng/dL
50+ years	2.1-18.8 ng/dL	50+ years	0.02-1.0 ng/dL



NT

#### 92160 Testosterone Free LC/MS, Females or Children

Specimen:			
Collect:	One SST		
	One Green Top (Li Heparin) One Green Top (Na Heparin) One Red Top		
Submit:	1 mL (Min:0.8 mL) Serum. Submit Refrigerated. Submit in a Standard Transport Tube.		
	Also Acceptable 1 mL (Min:0.8 mL) Plasma. Submit Refrigerated. Submit in a Standard Transport Tube.		
Special Handling:	Separate serum from cells ASAP or within 2 hours of collection Patient Preperation: Collect between 6-10 a.m. Remarks: This test is suggested for women and children due to an improved sensitivity of testosterone by LC-MS/MS.		
Rejection Criteria:	EDTA plasma		
Stability:	Ambient: 1 Day(s); Refrigerated: 1 Week(s); Frozen: 6 Month(s); Incubated: Unacceptable		
Methodology:	Electrochemiluminescent Immunoassay; Quantitative High Performance Liquid Chromatography-Tandem Mass Spectrometry		
Performed:	Sun-Sat		
Reported:	2-5 Day(s)		

New test option Free Testosterone, Females or Children.