

## Technical Update • April 2023

Cleveland Clinic Laboratories is dedicated to keeping you updated and informed about recent testing changes. This Technical Update is provided on a monthly basis to notify you of any changes to the tests in our catalog.

Recently changed tests are bolded, and they could include revisions to methodology, reference range, days performed, or CPT code. Deleted tests and new tests are listed separately. For your convenience, tests are listed alphabetically and order codes are provided.

To compare the new information with previous test information, refer to the online Test Directory at [clevelandcliniclabs.com](http://clevelandcliniclabs.com). Test information is updated in the online Test Directory on the Effective Date stated in the Technical Update. Please update your database as necessary.

For additional detail, contact Client Services at 216.444.5755 or 800.628.6816, or via email at [clientservices@ccf.org](mailto:clientservices@ccf.org).

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
3	25-Hydroxyvitamin D2 and D3													
3	Abscess and Wound Culture with Gram Stain													
3	Acylcarnitines, Plasma w/ Consultation													
4	Adiponectin													
4	Allergen, Cayenne Pepper													
4	Allergen, Cranberry IgE													
4	Allergen, Fungi and Molds, Chaetomium globosum IgE													
4	Aluminum, Urine 24 Hour													
5	Arsenic, Fractionated Urine													
5-6	Arsenic, Urine 24 Hr													
6	Babesia Microscopy													
6	Blood Parasites													
21	Bordetella pertussis Ab, IgG by ELISA, reflex to IB													
21	Bordetella pertussis Ab, IgM reflex IB													
21	Bordetella pertussis Antibody, IgA by Immunoblot													
21	Bordetella pertussis Antibody, IgG by Immunoblot													
21	Bordetella pertussis Antibody, IgM by Immunoblot													
21	Bordetella pertussis IgA and IgG Reflex IB													
21	Bordetella pertussis IgA, IgG, IgM													
21	Bordetella pertussis IgG and IgM with Reflex IB													

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Days Performed/Reported Reference Range	Stability	CPT	Fee
21	Cadmium Exposure Panel, OSHA												
6-7	Cadmium, Urine												
7	Calprotectin, Fecal												
7	Carbamazepine-10,11-Epoide												
7	Carbamazepine and Metabolite												
8	Carnitine Free & Total, Plasma												
8	Chromium, Urine												
8	CMV, qualitative by PCR, non-blood (CSF, bone marrow, amniotic fluid, ocular fluid)												
8	Cross-Linked N-telopeptide, Serum												
9	Cryoglobulin, Qual, Reflex to IFE Typing & Quant IgA, IgG, & IgM												
21	Enterovirus PCR CSF												
20	Epstein-Barr Virus by Qualitative PCR, CSF												
9	Felbamate												
21	Galactose-alpha-1,3-galactose IgE												
9	Group A Streptococcus by PCR												
9-10	Heavy Metals, Urine												
10-11	Heavy Metals with Cadmium, Ur												
11	Hemoglobin A1C												
11	HSV PCR – Miscellaneous Specimen Types												
21	Hypercoagulation Diagnostic Interpretive Panel												
21	Inhibin A (Dimer) and Inhibin B, Tumor Markers, Serum												
11-12	Iodine, Urine												
12	Lamotrigine												
12-13	Lead, Urine 24 Hour												
21	Legionella Culture												
13	Legionella Species Detection and Limited Differentiation by Multiplex Real-Time PCR												
14	Leukotriene E4, Urine 24 Hour												
14-15	LH, Pediatric												
15	Manganese, Urine												
15-16	Mercury, Urine 24 Hour												
16	Mycoplasma pneumoniae IgG												
16	Nickel, Urine 24 Hour												
16	NT Pro BNP												
17	Ova and Parasite Examination												
17	Oxcarbazepine Metabolite												
21	Parainfluenza 1,2,3 Abs												
17	Parvovirus B-19 Antibodies												

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Special Information	Specimen Requirement	Component Change(s)	Methodology	Days Performed/Reported	Reference Range	Stability	CPT	Fee
17	Parvovirus B19 IgG Antibodies												
17	Parvovirus B19 IgM Antibodies												
17	Pentobarbital												
20	RBC Folate (Reference Lab Only, Requires Hematocrit within 24 hours)												
18	Thallium, Urine												
18	Thyroglobulin Antibody												
18	Thyroglobulin, Serum with Reflex to IA or LC-MS/MS												
18	Treponema Pallidum IgG												
20	Triglycerides Body Fluid with Reflex to Chylomicron Electrophoresis												
18	Varicella Zoster by PCR												
19	Zinc, Urine Quantitative												
19	Zonisamide												

## Test Changes

Test Name	Order Code	Change	Effective Date
25-Hydroxyvitamin D2 and D3	D2D3	<b>Stability:</b> Ambient: 7 days Refrigerated: 21 days Frozen: <b>1 year</b>	effective immediately
Abscess and Wound Culture with Gram Stain	WCUL	<b>Name:</b> Previously Wound Culture and Gram Stain <b>Specimen Requirement:</b> Aspirate in sterile container; Ambient *OR* Other specimen in sterile container; Ambient; Purulent material should be transferred to a sterile container or anaerobe transport vial if an anaerobe culture is required. *OR* E Swab	effective immediately
Acylcarnitines, Plasma w/ Consultation	ACYLBI	<b>Specimen Requirement:</b> 1 mL plasma from EDTA (Lavender) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 m  L plasma from lithium heparin (Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL plasma from lithium heparin Plasma Separator (Light Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL serum from no additive (Red) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL plasma from sodium heparin (Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> <b>Stability:</b> Frozen: <b>After separation</b> from cells: 60 days	effective immediately

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Adiponectin	ADIP	<p><b>Special Information:</b> This test is New York DOH approved.</p> <p><b>Specimen Requirement:</b> 0.3 mL serum from Serum Separator (Gold) tube; Refrigerated; Centrifuge and transfer serum into standard aliquot tube. <b>Separate specimens must be submitted when multiple tests are ordered.</b> *OR* 0.3 mL serum from no additive (Red) tube; Refrigerated; Centrifuge and transfer serum into standard aliquot tube. <b>Separate specimens must be submitted when multiple tests are ordered.</b> *OR* 0.3 mL plasma from EDTA (Lavender) tube; Refrigerated; Centrifuge and transfer serum into standard aliquot tube. <b>Separate specimens must be submitted when multiple tests are ordered.</b></p> <p><b>Stability:</b>            Ambient: After separation from cells: <b>2 weeks</b>            Refrigerated: After separation from cells: <b>2 weeks</b>            Frozen: After separation from cells: <b>2 weeks</b></p> <p><b>Reference Range:</b> Refer to report</p> <p><b>Days Performed:</b> Varies</p> <p><b>Reported:</b> 8–12 days</p>	effective immediately
Allergen, Cayenne Pepper	CAYENN	<p><b>Special Information:</b> Hemolyzed, icteric or lipemic samples will be rejected. <b>This test is New York DOH approved.</b></p> <p><b>Specimen Requirement:</b> 0.5 mL serum from Serum Separator (Gold) tube; Minimum 0.25 mL; Refrigerated; Separate serum from cells <b>ASAP</b> or within 2 hours of collection.</p> <p><b>Stability:</b>            Ambient: <b>48 hours</b>            Refrigerated: 2 weeks            Frozen: 1 year</p>	effective immediately
Allergen, Cranberry IgE	CRANBY	<p><b>Special Information:</b> Hemolyzed, icteric or lipemic samples will be rejected. <b>This test is New York DOH approved.</b></p> <p><b>Specimen Requirement:</b> 0.5 mL serum from Serum Separator (Gold) tube; Minimum 0.25 mL; Refrigerated; Separate serum from cells <b>ASAP</b> or within 2 hours of collection.</p>	effective immediately
Allergen, Fungi and Molds, Chaetomium globosum IgE	CHAETG	<p><b>Special Information:</b> Hemolyzed, icteric or lipemic samples will be rejected. <b>This test is New York DOH approved.</b></p> <p><b>Specimen Requirement:</b> 0.5 mL serum from Serum Separator (Gold) tube; Minimum 0.25 mL; Refrigerated; Separate serum from cells <b>ASAP</b> or within 2 hours of collection.</p>	effective immediately
Aluminum, Urine 24 Hour	UAL24	<p><b>Special Information: Patient Prep: High concentrations of iodine may interfere with testing.</b> 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). Avoid iodine-containing medications or contrast agents for at least 1 month. <b>Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. <b>Patient Prep: High concentrations of iodine may interfere with testing.</b> 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). Avoid iodine-containing medications or contrast agents for at least 1 month. <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in plastic container; Refrigerated; <b>Patient Prep: High concentrations of iodine may interfere with testing.</b> 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). Avoid iodine-containing medications or contrast agents for at least 1 month. <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Arsenic, Fractionated Urine	UASFR	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p><b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected. This test is New York DOH approved.</p> <p><b>Clinical Information:</b> The ACGIH Biological Exposure Index for the sum of inorganic and methylated species of arsenic is 35 µg/L. Inorganic species of arsenic are most toxic. Methylated species arise primarily from metabolism of inorganic species but may also come from dietary sources and are of moderate toxic potential. The organic species of arsenic are considered nontoxic and arise primarily from food. The sum of the inorganic, methylated, and organic species of arsenic may be lower than the total arsenic concentration due to the presence of unidentified organic species of arsenic.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. HEAVY METALS FORM REQUIRED to meet State Health Department requirements. <b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic container; Refrigerated; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. <b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p>	5/25/23
Arsenic, Urine 24 Hr	UARSND	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p><b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p> <p><b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p>	5/25/23

(continued on page 6)

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Arsenic, Urine 24 Hr <i>(continued from page 5)</i>		<p><b>Clinical Information:</b> This test is useful for the assessment of acute or chronic arsenic exposure. The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 µg/L. <b>The ACGIH BEI is based on the sum of inorganic and methylated species.</b> For specimens with elevated total arsenic results, fractionation is automatically performed at additional cost to determine the proportions of inorganic, methylated and organic species. <b>Per 24h calculations are provided to aid interpretation for collections with a duration of 24 hours and an average daily urine volume. For specimens with notable deviations in collection time or volume, ratios of analytes to a corresponding urine creatinine concentration may assist in result interpretation</b></p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in plastic container; Refrigerated; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</b></p>	
Babesia Microscopy	BABESI	<p><b>Stability:</b> Ambient: 24 hours Refrigerated: <b>24 hours</b> Frozen: Unacceptable</p>	effective immediately
Blood Parasites	BLDPAR	<p><b>Stability:</b> Ambient: 24 hours Refrigerated: <b>24 hours</b> Frozen: Unacceptable</p>	effective immediately
Cadmium, Urine	URCAD	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p><b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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). <b>Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p> <p><b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b></p> <p>This test is New York DOH approved.</p> <p><b>Clinical Information:</b> This test may be useful in the assessment of chronic exposure and determination of cadmium body burden. In chronic exposures, the kidneys are the primary target organ. Symptoms associated with cadmium toxicity vary based upon route of exposure and may include tubular proteinuria, fever, headache, dyspnea, chest pain, conjunctivitis, rhinitis, sore throat and cough. Ingestion of cadmium in high concentration may cause vomiting, diarrhea, salivation, cramps, and abdominal pain.</p> <p><i>(continued on page 7)</i></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Cadmium, Urine <i>(continued from page 6)</i>		<p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection. HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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). <b>Avoid</b> iodine-containing medications or contrast agents for at least 1 month. <b>Avoid gadolinium-based contrast media for at least 48 hours.</b></p> <p><b>Collection:</b> Collect in a plastic container, <b>mix well and</b> aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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). <b>Avoid</b> iodine-containing medications or contrast agents for at least 1 month. <b>Avoid gadolinium-based contrast media for at least 48 hours.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and</b> aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b></p>	
Calprotectin, Fecal	CALPRO	<p><b>For interface clients only–Test build may need to be modified</b></p> <p><b>Stability:</b>            Ambient: <b>6 hours</b>            Refrigerated: <b>3 days</b>            Frozen: <b>16 weeks</b></p> <p><b>Methodology: Chemiluminescence Immunoassay (CLIA)</b></p> <p><b>Reference Range:</b>  <b>Fecal Calprotectin Concentration (CALPRO): &lt; 50 ug/g</b>  <b>Fecal Calprotectin Interpretation (CPINT): Normal</b></p> <p><b>Days Performed: Mon–Fri</b></p>	5/23/23
Carbamazepine-10,11-Epoxyde	CARBEP	<p><b>Special Information:</b> Collect specimen immediately prior to next dose.</p> <p><b>Clinical Information: Monitor therapeutic administration.</b></p> <p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin <b>no-gel</b> (Green) tube; <b>Minimum 0.5 mL</b>; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate. Transport and store at refrigerated temperature.</b> *OR* 2 mL serum from no additive (Red) tube; <b>Minimum 0.5 mL</b>; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate. Transport and store at refrigerated temperature.</b></p> <p><b>Stability:</b>            Ambient: <b>After separation from cells: 24 hours</b>            Refrigerated: <b>After separation from cells: 14 days</b>            Frozen: <b>After separation from cells: 30 days</b></p> <p><b>Methodology: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)</b></p> <p><b>Days Performed: Mon–Sat 8:00 am</b></p> <p><b>Reported: 1–3 days</b></p>	5/23/23
Carbamazepine and Metabolite	CARBME	<p><b>Special Information:</b> Collect specimen immediately prior to next dose.</p> <p><b>Clinical Information: Monitor therapeutic administration.</b></p> <p><b>Specimen Requirement:</b> 3 mL plasma from lithium heparin <b>no-gel</b> (Green) tube; Refrigerated; Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a <b>plastic CCL tube within 2 hours of collection</b> and refrigerate. <b>Transport and store at refrigerated temperature.</b> *OR* 3 mL serum from no additive (Red) tube; Refrigerated; Do not collect in a gel separator tube. Centrifuge and transfer the serum to a <b>plastic CCL tube within 2 hours of collection</b> and refrigerate. <b>Transport and store at refrigerated temperature.</b></p> <p><b>Methodology:</b>  <b>Kinetic Interaction of Microparticles in a Solution</b>  <b>Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)</b></p> <p><b>Days Performed: Mon–Sat 8:00 am</b></p> <p><b>Reported: 1–3 days</b></p>	5/23/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Carnitine Free & Total, Plasma	CARNPL	<p><b>Specimen Requirement:</b> 1 mL plasma from EDTA (Lavender) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL serum from no additive (Red) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL plasma from Lithium heparin (Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL plasma from Lithium heparin Plasma Separator (Light Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b> *OR* 1 mL plasma from Sodium heparin (Green) tube; <b>Frozen;</b> Remove plasma from cells <b>within 2 hours of collection and then freeze.</b></p> <p><b>Stability:</b> Frozen: <b>After separation</b> from cells: 60 days</p>	effective immediately
Chromium, Urine	UCHRO	<p><b>Special Information: Patient Prep:</b> High concentrations of iodine may interfere with testing. 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><b>Clinical Information: This test</b> may be useful to monitor short term exposure. The form of chromium greatly influences distribution. Trivalent chromium resides in the plasma and is usually not of clinical importance. Hexavalent chromium is considered highly toxic. Symptoms associated with chromium toxicity vary based upon route of exposure and dose and may include dermatitis, impairment of pulmonary function, gastroenteritis, hepatic necrosis, bleeding, and acute tubular necrosis. The ACGIH Biological Exposure Index for daily exposure of hexavalent chromium is an increase of 10 <math>\mu\text{g/gCRT}</math> between pre-shift and post-shift urine collections. The ACGIH Biological Exposure Index for long and short-term hexavalent chromium is an end-of-shift concentration of 30 <math>\mu\text{g/gCRT}</math> at the end of the work week.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection. <b>Patient Prep: High concentrations of iodine may interfere with testing. 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). Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic container; Refrigerated; Patient Prep: High concentrations of iodine may interfere with testing. 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). Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</b></p>	5/25/23
CMV, qualitative by PCR, non-blood (CSF, bone marrow, amniotic fluid, ocular fluid)	CMVCSF	<p><b>Specimen Requirement:</b> 1 mL cerebrospinal fluid (CSF) in sterile container; Frozen *OR* 1 mL ocular fluid in sterile container; Testing from ocular fluid may be performed with a disclaimer for short volume on as little as 20 <math>\mu\text{L}</math> sample. <b>The performing laboratory (ARUP) will determine whether there is sufficient volume for testing to be performed.</b> Frozen *OR* Tissue in sterile container; Transfer tissue to sterile container and freeze immediately. Specimen source required. Do not send tissues in optimal cutting temperature compound. Frozen *OR* 1 mL Bronch (BAL) in sterile container; Frozen *OR* 1 mL bone marrow in EDTA (Lavender) tube; Send specimen in EDTA lavender tube or sterile container. Refrigerated *OR* 1 mL amniotic fluid in sterile container; Frozen</p>	effective immediately
Cross-Linked N-telopeptide, Serum	NTX	<b>Days Performed: Alternate Wed</b>	effective immediately



## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Cryoglobulin, Qual, Reflex to IFE Typing & Quant IgA, IgG, & IgM	CRYAGM	<p><b>Special Information:</b> Collect in a pre-warmed 6 mL red top tube and fill completely. Do not use serum separator tubes. Immediately after collection, place tubes in heel warmer or 37°C (warm, not hot) water. Keep sample warm, and allow to clot at 37°C for 90 minutes. Centrifuge at 37°C, if possible (do not use refrigerated centrifuge), and separate serum from cells. Refrigerate and transport serum after removal from cells. Proper collection and transport of specimen is critical to the outcome of the test. Quantities less than 3 mL may affect the sensitivity of the test. If Cryoglobulin Qualitative is positive, then Immunofixation Electrophoresis Typing and Quantitative IgA, IgG and IgM will be added. Additional charges apply.</p> <p><b>Specimen Requirement:</b> 3 mL serum from no additive (Red) tube; Refrigerated; Collect in a pre-warmed 6 mL red top tube and fill completely. Do not use serum separator tubes. Immediately after collection, place tubes in heel warmer or 37°C (warm, not hot) water. Keep sample warm, and allow to clot at 37°C for 90 minutes. Centrifuge at 37°C, if possible (do not use refrigerated centrifuge), and separate serum from cells. Refrigerate and transport serum after removal from cells.</p>	effective immediately
Felbamate	FELBA	<p><b>Special Information:</b> Collect specimen immediately prior to next dose.</p> <p><b>Clinical Information:</b> Monitor therapeutic administration.</p> <p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin (Green) no-gel tube; Refrigerated; Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate. Transport and store at refrigerated temperature. *OR* 2 mL serum from no additive (Red) tube; Refrigerated; Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate. Transport and store at refrigerated temperature.</p> <p><b>Stability:</b>            Ambient: After separation from cells: 24 hours            Refrigerated: After separation from cells: 14 days            Frozen: After separation from cells: 30 days</p> <p><b>Methodology:</b> Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)</p> <p><b>Days Performed:</b> Mon–Sat</p> <p><b>Reported:</b> 1–3 days</p>	5/23/23
Group A Streptococcus by PCR	GASPCR	<p><b>Special Information:</b> Any collection device other than e-swab will be rejected. Specimens outside of stability will be rejected.</p> <p><b>Stability:</b>            Ambient: Swabs must be tested within 48 hours from collection            Refrigerated: Swabs must be tested within 6 days from collection            Frozen: Swabs received frozen will be rejected.</p>	effective immediately
Heavy Metals, Urine	UTXM3	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p>Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p> <p>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</p> <p>This test is New York DOH approved.</p> <p><i>(continued on page 10)</i></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Heavy Metals, Urine <i>(continued from page 9)</i>	UTXM3	<p><b>Clinical Information:</b> This test may be useful in the assessment of acute and chronic exposure to arsenic, mercury, and lead. Quantification of urine excretion rates before or after chelation therapy has been used as an indicator of lead exposure. Urinary excretion of &gt; 125 mg of lead per 24 hours is usually associated with related evidence of lead toxicity. Urinary mercury levels predominantly reflect acute or chronic elemental or inorganic mercury exposure. Urine concentrations in unexposed individuals are typically less than 10 µg/L. 24 hour urine concentrations of 30 to 100 µg/L may be associated with subclinical neuropsychiatric symptoms and tremor while concentrations greater than 100 µg/L can be associated with overt neuropsychiatric disturbances and tremors. Urine mercury levels may be useful in monitoring chelation therapy. The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 µg/L. The ACGIH BEI is based on the sum of inorganic and methylated species. For specimens with elevated total arsenic results, fractionation is automatically performed at additional cost to determine the proportions of inorganic, methylated and organic species.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b></p>	5/25/23
Heavy Metals with Cadmium, Ur	UTXM4	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> <b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b></p> <p>This test is New York DOH approved.</p> <p><b>Clinical Information:</b> This test may be useful in the assessment of acute and chronic exposure to arsenic, cadmium, mercury, and lead. Urine cadmium levels can be used to assess cadmium body burden. In chronic exposures, the kidneys are the primary target organ. Symptoms associated with cadmium toxicity vary based upon route of exposure and may include tubular proteinuria, fever, headache, dyspnea, chest pain, conjunctivitis, rhinitis, sore throat and cough. Ingestion of cadmium in high concentration may cause vomiting, diarrhea, salivation, cramps, and abdominal pain. Quantification of urine excretion rates before or after chelation therapy has been used as an indicator of lead exposure. Urinary excretion of &gt;125 mg of lead per 24 hours is usually associated with related evidence of lead toxicity. Urinary mercury levels predominantly reflect acute or chronic elemental or inorganic mercury exposure. Urine concentrations in unexposed individuals are typically less than 10 µg/L. 24 hour urine concentrations of 30 to 100 µg/L may be associated with subclinical neuropsychiatric symptoms and tremor while concentrations greater than</p> <p><i>(continued on page 11)</i></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Heavy Metals with Cadmium, Ur (continued from page 10)	UTXM4	<p>100 µg/L can be associated with overt neuropsychiatric disturbances and tremors. Urine mercury levels may be useful in monitoring chelation therapy. The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 µg/L. The ACGIH BEI is based on the sum of inorganic and methylated species. For specimens with elevated total arsenic results, fractionation is automatically performed at additional cost to determine the proportions of inorganic, methylated and organic species.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection; <b>HEAVY METALS FORM REQUIRED</b> to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a <b>plastic</b> container, <b>mix well</b> and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; <b>HEAVY METALS FORM REQUIRED</b> to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a <b>plastic</b> container, <b>mix well</b> and aliquot into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b></p>	5/25/23
Hemoglobin A1C	HBA1C	<p><b>Stability:</b>            Ambient: 5 days            Refrigerated: 14 days            Frozen: <b>7 days</b></p>	effective immediately
HSV PCR - Miscellaneous Specimen Types	PCRHSV	<p><b>Specimen Requirement:</b> 1 mL ocular fluid in sterile container; Specimen source required. Testing from ocular fluid may be performed with a disclaimer for short volume on as little as <b>20 µL</b> sample. <b>The performing laboratory (ARUP) will determine whether there is sufficient volume for testing to be performed.</b> Frozen *OR* Tissue in sterile container; Transfer tissue to sterile container and freeze immediately. Specimen source required. Do not send tissues in optimal cutting temperature compound. Frozen *OR* 1 mL plasma from EDTA (Lavender) tube; Separate plasma from cells and transfer into sterile aliquot tube. Specimen source required. Frozen *OR* 1 mL serum from serum separator (Gold) tube; Separate serum from cells and transfer into sterile aliquot tube. Specimen source required. Frozen *OR* 1 mL amniotic fluid in sterile container; Specimen source required. Frozen *OR* 1 mL bronch (BAL) in sterile container; Specimen source required. Frozen *OR* 3 mL vesicle fluid; Transfer vesicle fluid to Viral Transport Media. Specimen source required. Frozen *OR* one endocervical thin prep; Specimen source required. Frozen</p>	effective immediately
Iodine, Urine	UIODNE	<p><b>Special Information:</b> Patient Prep: <b>High concentrations of iodine may interfere with testing.</b> 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). <b>Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b></p> <p><b>Collection:</b> Collect in a <b>plastic</b> container, <b>mix well</b> and aliquot into a <b>trace metal free transport tube (ARUP #43116).</b> <b>Record total volume and collection time interval on specimen.</b></p> <p><b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><b>Clinical Information:</b> <b>This test is useful</b> for the assessment of iodine nutritional status. This test reports total iodine from all iodine-containing species present in the specimen but does not determine the chemical form (species) of the iodine present. Values &gt; 1000 µg/L may indicate dietary excess, but more frequently suggest recent drug or contrast media exposure.</p> <p>(continued on page 12)</p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Iodine, Urine <i>(continued from page 11)</i>	UIODNE	<p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerated; Patient Prep: <b>High concentrations of iodine may interfere with testing.</b> 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). <b>Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b></p> <p><b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot into a trace metal free transport tube (ARUP #43116).</b> Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic container; Refrigerated; Patient Prep: <b>High concentrations of iodine may interfere with testing.</b> 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). <b>Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot into a trace metal free transport tube (ARUP #43116).</b> Record total volume and collection time interval on specimen.</p>	5/25/23
Lamotrigine	LMTR	<p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin <b>no-gel (Green)</b> tube; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature. *OR* 2 mL serum from no additive (Red) tube; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature.</p> <p><b>Stability:</b>            Ambient: <b>After separation from cells: 24 hours</b>            Refrigerated: <b>After separation from cells: 14 days</b>            Frozen: <b>After separation from cells: 30 days</b></p> <p><b>Methodology:</b> Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)  <b>Days Performed:</b> Mon-Sat 8:00 am  <b>Reported:</b> 1–3 days</p>	5/23/23
Lead, Urine 24 Hour	ULEADQ	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p><b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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) <b>and avoid seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot into a trace metal free transport tube (ARUP #43116).</b> Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected. This test is New York DOH approved.</p> <p><b>Clinical Information:</b> This test may be useful in the assessment of chronic lead exposure or in monitoring chelation therapy. Quantification of urine excretion rates before or after chelation therapy has been used as an indicator of lead exposure. Urinary excretion of &gt;125 mg of lead per 24 hours is usually associated with related evidence of lead toxicity.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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) <b>and avoid seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot into a trace metal free transport tube (ARUP #43116).</b> Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic</p> <p><i>(continued on page 13)</i></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Lead, Urine 24 Hour <i>(continued from page 12)</i>	ULEADQ	container; Refrigerated; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.	5/25/23
Legionella Species Detection and Limited Differentiation by Multiplex Real-Time PCR	LEGPCR	<p><b>Name:</b> Previously Legionella pneumophila PCR</p> <p><b>Clinical Limitation:</b> This assay is intended for use as a lab-developed test for the qualitative simultaneous detection and differentiation of Legionella spp., L. pneumophila and L. pneumophila sg1 from lower respiratory specimens. It is meant to be used as an aid in diagnosis of legionellosis, in conjunction with other clinical and laboratory information. Based on the methodology, the assay may be falsely negative in cases with very low bacterial burden, or caused by uncommon Legionella species. It may be falsely positive in cases of upper airway colonization/contamination, or transient/remnant presence of nucleic acid. Specimens positive for Legionella spp. by this assay will be reflexed to culture for attempted isolation of the organism, with results reported separately.</p> <p><b>Clinical Information:</b> Legionella are an important cause of community-acquired pneumonia, and are associated with diseases known commonly as Legionnaire's disease and Pontiac Fever. Legionella species are found naturally in freshwater environments and can cause outbreaks when they grow in human-made water systems like indoor plumbing systems and cooling towers. The diseases associated with Legionella infection, known collectively as legionellosis, are generally caused by exposure to such contaminated water. The rapid and accurate detection of Legionella species in lower respiratory specimens is important for tailoring antimicrobial therapy and for epidemiologic investigation. Bacteriologic culture of these gram-negative bacilli requires specialized media, and is slow and relatively insensitive compared to molecular methods. Legionella urine antigen testing is a rapid and less-invasive method for diagnosis, but is only reliably positive in Legionella pneumophila serogroup 1 (sg1) infections.</p> <p><b>Clinical Information (continued):</b> Real-time polymerase chain reaction (RT-PCR) is a fast and sensitive method to detect Legionella species in respiratory samples. This multiplex RT-PCR assay originally published by the Centers for Disease Control (CDC) simultaneously detects Legionella species, and differentiates between Legionella species (ssrA gene), L. pneumophila (mip gene), and L. pneumophila serogroup 1 (wzm gene).</p> <p><b>Clinical Reference:</b> Benitez AJ, Winchell JM. Clinical application of a multiplex real-time PCR assay for simultaneous detection of Legionella species, Legionella pneumophila, and Legionella pneumophila serogroup 1. J Clin Microbiol. 2013 Jan;51(1):348-51. doi: 10.1128/JCM.02510-12. Epub 2012 Nov 7. Erratum in: J Clin Microbiol. 2014 Feb;52(2):709. PMID: 23135949.</p> <p><b>Specimen Requirement:</b> 3 mL bronch (BAL) in sterile container; Minimum 1 mL; Ambient: Collect and submit the specimen in a sterile container (ie. Oracle #1012787, Covidien #2200SA). If aliquoting is necessary, sterile tubes must be used. *OR* 1 mL induced sputum in sterile container; Minimum 1 mL; Collect and submit the specimen in a sterile container (ie. Oracle #1012787, Covidien #2200SA). If aliquoting is necessary, sterile tubes must be used. *OR* 1 mL tracheal aspirate in sterile container; Minimum 1 mL; Collect and submit the specimen in a sterile container (ie. Oracle #1012787, Covidien #2200SA). If aliquoting is necessary, sterile tubes must be used. *OR* 1 mL bronch washings in sterile container; Minimum 1 mL; Collect and submit the specimen in a sterile container (ie. Oracle #1012787, Covidien #2200SA). If aliquoting is necessary, sterile tubes must be used.</p> <p><b>Reference Range:</b> Legionella species DNA (PCRLEG): Not Detected</p>	5/2/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Leukotriene E4, Urine 24 Hour	ULTE4	<p><b>Specimen Requirement:</b> 5 mL urine from 24-hour (well-mixed) urine in clean container (<b>no preservatives</b>); Refrigerate during collection. <b>Transport Frozen; Start collection within a few hours of symptom onset and collect urine for 24 hours.</b> <b>Specimen volume and 24-Hour Urine collection duration are required.</b></p> <p><b>Stability:</b>                      Ambient: 24 hours                      Refrigerated: 7 days                      Frozen: <b>28</b> days</p>	effective immediately
LH, Pediatric	LHPED	<p><b>Special Information:</b> Grossly hemolyzed, lipemic or icteric specimens will be rejected. This test is New York DOH approved.</p> <p><b>Clinical Limitation:</b> Cross-reactivity with thyroid-stimulating hormone (TSH) (&lt;5%) might be observed at TSH concentrations of 500 mIU/L. Some patients who have been exposed to animal antigens, either in the environment or as part of treatment or imaging procedures, may have circulating anti-animal antibodies present. These antibodies may interfere with the assay reagents to produce unreliable results.</p> <p><b>Clinical Information:</b> This test is useful for diagnosis of precocious puberty and delayed puberty in children. Luteinizing hormone (LH) is a glycoprotein hormone consisting of 2 noncovalently bound subunits (alpha and beta). LH is produced by the anterior pituitary gland under regulation of the hypothalamic gonadotropin releasing hormone (GnRH) and feedback from gonadal steroid hormones. In children, LH, along with follicle-stimulating hormone (FSH), is used to diagnose precocious (early) and delayed puberty.</p> <p><b>Clinical Information (continued):</b> Precocious puberty refers to the appearance of physical and hormonal signs of pubertal development at an earlier age than is considered normal (before 8 years of age in girls and 9 years of age in boys). Evaluation of precocious puberty includes measurement of LH and FSH to determine whether gonadotropins are increased in relation to chronologic age (gonadotropin-dependent) or whether sex steroid secretion is occurring independent of LH and FSH (gonadotropin-independent). In gonadotropin-dependent precocious puberty, basal LH levels are often elevated into the pubertal range and show a pubertal (heightened) response to GnRH stimulation. In gonadotropin-independent precocious puberty, the LH level is low at baseline and fails to respond to GnRH stimulation.</p> <p><b>Clinical Information (continued):</b> Delayed puberty is defined clinically by the absence or incomplete development of secondary sexual characteristics by age 14 years in boys and by age 12 years in girls. Delayed puberty usually results from inadequate gonadal steroid secretion that, in turn, is most often caused by a defective gonadotropin secretion from the anterior pituitary, due to defective production of GnRH from the hypothalamus. Random measurements of LH and FSH, together with estradiol (females) or testosterone (males), are useful to distinguish between primary and secondary causes of delayed puberty. This assay is sensitive to 0.02 IU/L and is more appropriate for use in children.</p> <p><b>Specimen Requirement:</b> 0.25 mL serum from no additive (Red) tube; Minimum 0.15 mL; Refrigerated; Separate serum from cells ASAP or within 2 hours of collection. Transfer serum to standard aliquot tube. *OR* 0.25 mL serum from Serum Separator (Gold) tube; Minimum 0.15 mL; Refrigerated; <b>Separate serum from cells ASAP or within 2 hours of collection.</b></p> <p><b>Stability:</b>                      Ambient: <b>After separation from cells: Unacceptable</b>                      Refrigerated: After separation from cells: 14 days                      Frozen: After separation from cells: <b>90</b> days</p> <p><b>Methodology:</b> Chemiluminescence Immunoassay (CLIA)</p> <p><b>Reference Range:</b>                      Female 0 Days to 364 Days: &lt;0.02-18.3 IU/L                      Female 1 Year to 8 Years: &lt;0.02-0.3 IU/L                      Female 9 Years to 10 Years: &lt;0.02-4.8 IU/L                      Female 11 Years to 13 Years: &lt;0.02-11.7 IU/L                      Female 14 Years to 17 Years: &lt;0.02-16.7 IU/L                      Female Tanner Stage I (1-8 Years): &lt;0.02-0.3 IU/L                      Female Tanner Stage II: &lt;0.02-4.1 IU/L                      Female Tanner Stage III: 0.6-7.2 IU/L                      Female Tanner Stage IV-V: 0.9-13.3 IU/L</p> <p><i>(continued on page 15)</i></p>	5/11/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
LH, Pediatric <i>(continued from page 14)</i>	LHPED	<p><b>Reference Range (continued):</b>  <b>Male 0 Days to 364 Days:</b> &lt;0.02-5.0 IU/L  <b>Male 1 Year to 8 Years:</b> &lt;0.02-0.5 IU/L  <b>Male 9 Years to 10 Years:</b> &lt;0.02-3.6 IU/L  <b>Male 11 Years to 13 Years:</b> 0.1-5.7 IU/L  <b>Male 14 Years to 17 Years:</b> 0.8-8.7 IU/L  <b>Male Tanner Stage 1 (1-8 Years):</b> &lt;0.02-0.5 IU/L  <b>Male Tanner Stage II:</b> 0.03-3.7 IU/L  <b>Male Tanner Stage III:</b> 0.09-4.2 IU/L  <b>Male Tanner Stage IV-V:</b> 1.3-9.8 IU/L</p> <p><b>Days Performed:</b> Tue, Thu  <b>Reported:</b> 3–7 days</p>	5/11/23
Manganese, Urine	UMANG	<p><b>Special Information: Patient Prep:</b> High concentrations of iodine may interfere with testing. 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p> <p><b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b></p> <p>This test is New York DOH approved.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. <b>Patient Prep: High concentrations of iodine may interfere with testing. 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). Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic container; Refrigerated; <b>Patient Prep: High concentrations of iodine may interfere with testing. 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). Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p>	5/25/23
Mercury, Urine 24 Hour	UMERC3	<p><b>Special Information:</b> HEAVY METALS FORM REQUIRED to meet State Health Department requirements.</p> <p><b>Patient Prep:</b> High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. <b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><i>(continued on page 16)</i></p>	5/25/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Mercury, Urine 24 Hour <i>(continued from page 15)</i>		<p><b>Clinical Information:</b> This test may be useful in the assessment of acute or chronic elemental or inorganic mercury exposure and/or in monitoring chelation therapy. Urinary mercury levels predominantly reflect acute or chronic elemental or inorganic mercury exposure. Urine concentrations in unexposed individuals are typically less than 10 µg/L. 24 hour urine concentrations of 30 to 100 µg/L may be associated with subclinical neuropsychiatric symptoms and tremor while concentrations greater than 100 µg/L can be associated with overt neuropsychiatric disturbances and tremors. Urine mercury levels may be useful in monitoring chelation therapy.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection. <b>HEAVY METALS FORM REQUIRED</b> to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot</b> into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b> *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; <b>HEAVY METALS FORM REQUIRED</b> to meet State Health Department requirements. Patient Prep: High concentrations of iodine may interfere with testing. 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 seafood for 48 hours. <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot</b> into a trace metal free transport tube (ARUP #43116). <b>Record total volume and collection time interval on specimen.</b></p>	
Mycoplasma pneumoniae IgG	MYCOG	<p><b>Days Performed:</b> Tue, Fri <b>Reported:</b> 1–5 days</p>	effective immediately
Nickel, Urine 24 Hour	UNI24	<p><b>Special Information: Patient Prep:</b> High concentrations of iodine may interfere with testing. 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). <b>Avoid</b> iodine-containing medications or contrast agents for at least 1 month. <b>Avoid gadolinium-based contrast media for at least 48 hours.</b> <b>Collection:</b> <b>Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection. <b>Patient Prep:</b> <b>High concentrations of iodine may interfere with testing. 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). Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot</b> into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on <b>specimen.</b> *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; <b>Patient Prep:</b> <b>High concentrations of iodine may interfere with testing. 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). Avoid iodine-containing medications or contrast agents for at least 1 month. Avoid gadolinium-based contrast media for at least 48 hours.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and aliquot</b> into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on <b>specimen.</b></p>	5/25/23
NT Pro BNP	NTBNP	<p><b>Special Information:</b> <b>Note:</b> <i>Biotin comment has been removed</i></p>	5/23/23



## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Ova and Parasite Examination	OVAP	<p><b>Clinical Information:</b> The Ova and Parasite screen (OVAPSC) is more sensitive than the Ova and Parasite exam (OVAP) for the detection of Giardia, the most commonly encountered enteric parasite in this locale. The Ova and Parasite screen (OVAPSC) should be used, rather than the Ova and Parasite exam (OVAP), unless other enteric parasites are suspected. The Ova and Parasite exam (OVAP) should be ordered to detect and identify the presence of enteric protozoa and the eggs of helminths. This test should be reserved for individuals with significant risk factors for enteric parasitosis (eg, immigration from or travel to an endemic area). In such cases, a minimum of 3 specimens collected over 3–10 days are recommended. Stool should be collected using a stool collection kit (<b>O-P Kit Para-Pak includes 1 vial of 10% formalin and 1 vial of PVA</b>). Special studies are needed for the detection of Cryptosporidium, Cyclospora, Cystoisospora, microsporida, pinworm, worm identification, and parasites in unusual locations. Non-stool specimens should be collected using a sterile screw-top transport container.</p> <p><b>Specimen Requirement:</b> 3-5 mL body fluid in sterile container; Ambient; Sterile leakproof container should be used with transport at room temperature. *OR* 15 mL random urine in sterile container; Ambient; Urine specimens should be freshly voided and submitted in a sterile leakproof container. Transport at ambient temperature. *OR* unspecified respiratory specimen in sterile container; Ambient; Sterile leakproof container should be used with transport at room temperature. *OR* 5 mL sputum in clean container; Ambient; Sterile leakproof container should be used with transport at room temperature. *OR* 5 mL stool in O-P kit; Ambient; <b>O-P Kit Para-Pak includes 1 vial of 10% formalin and 1 vial of PVA</b>. Recommended screening procedure is 3 stool specimens, 1 per day for each of 3 days.</p>	effective immediately
Oxcarbazepine Metabolite	OXCARB	<p><b>Name:</b> Previously Oxcarbazepine</p> <p><b>Special Information:</b> Collect specimen immediately prior to next dose.</p> <p><b>Clinical Information:</b> Monitor therapeutic administration.</p> <p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin <b>no-gel</b> (Green) tube; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature. *OR* 2 mL serum from no additive (Red) tube; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature.</p> <p><b>Stability:</b>            Ambient: <b>After separation from cells:</b> 24 hours            Refrigerated: <b>After separation from cells:</b> 14 days            Frozen: <b>After separation from cells:</b> 30 days</p> <p><b>Methodology:</b> Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)  <b>Days Performed:</b> Mon–Sat 8:00 am</p>	5/23/23
Parvovirus B-19 Antibodies	PARV	Days Performed: Mon, Thu	effective immediately
Parvovirus B19 IgG Antibodies	PARVOG	Days Performed: Mon, Thu	effective immediately
Parvovirus B19 IgM Antibodies	PARVOM	Days Performed: Mon, Thu	effective immediately
Pentobarbital	PENTOB	<p><b>Special Information:</b> Collect specimen immediately prior to next dose. Urgent test, deliver sample immediately to Special Chemistry (LL3).</p> <p><b>Clinical Information:</b> Monitor therapeutic administration.</p> <p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin <b>no-gel</b> (Green) tube; Minimum 0.5 mL; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature. *OR* 2 mL serum from no additive (Red) tube; Minimum 0.5 mL; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature.</p> <p><b>Stability:</b>            Ambient: <b>After separation from cells:</b> 24 hours            Refrigerated: <b>After separation from cells:</b> 14 days            Frozen: <b>After separation from cells:</b> 30 days</p> <p><b>Methodology:</b> Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)  <b>Days Performed:</b> Sun–Sat 8:00 am</p>	5/23/23

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Thallium, Urine	UTHAL	<p><b>Special Information:</b> Patient Prep: High concentrations of iodine may interfere with testing. 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). Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function. <b>Collection: Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116).</b> Record total volume and collection time interval on <b>specimen</b>.</p> <p><b>Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected.</b> This test is New York DOH approved.</p> <p><b>Clinical Information: This test may be useful as a biomarker of chronic thallium exposure.</b> Urinary thallium levels may reflect recent or chronic exposure, and the presence of thallium in urine after acute exposure may persist for up to several weeks. Concentrations less than 5 µg/L are unlikely to cause adverse health effects while concentrations greater than 500 µg/L have been associated with clinical poisoning. After severe thallium poisoning, reported symptoms have varying times of onset and include gastroenteritis, multi-organ failure and neurologic injury. Peripheral neuropathy and alopecia are well-documented effects of acute and chronic exposure. Human health effects from low level thallium exposure are unknown.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in <b>plastic</b> container; Refrigerate during collection. Patient Prep: High concentrations of iodine may interfere with testing. 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and</b> aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on <b>specimen</b>. *OR* 8 mL random urine in <b>plastic</b> container; Refrigerated; Patient Prep: High concentrations of iodine may interfere with testing. 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, <b>mix well and</b> aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on <b>specimen</b>.</p>	5/25/23
Thyroglobulin Antibody	TGAB	<p><b>Stability:</b> Ambient: 8 hours Refrigerated: 7 days Frozen: <b>30</b> days</p>	4/6/23
Thyroglobulin, Serum with Reflex to IA or LC-MS/MS	THYRORF	<p><b>Stability:</b> Ambient: 8 hours Refrigerated: 7 days Frozen: <b>30</b> days</p>	4/6/23
Treponema Pallidum IgG	TPAG	Days Performed: Mon, Wed, Fri	effective immediately
Varicella Zoster by PCR	VZPCR	<p><b>Specimen Requirement:</b> 1 mL cerebrospinal fluid (CSF) in sterile container; Specimen source is required; Frozen *OR* 1 mL ocular fluid in sterile container; Specimen source is required. Testing from ocular fluid may be performed with a disclaimer for short volume on as little as <b>20 uL sample. The performing laboratory (ARUP) will determine whether there is sufficient volume for testing to be performed.</b> Frozen *OR* Tissue in sterile container; Transfer tissue to sterile container and freeze immediately. Specimen source required. Do not send tissues in optimal cutting temperature compound. Frozen *OR* 1 mL plasma from EDTA (Lavender) tube; Specimen source is required. Frozen *OR* 1 mL serum from serum separator (Gold) tube; Specimen source is required. Frozen *OR* 1 mL vesicle fluid on swab in M4 or Universal Transport Media (UTM); Specimen source is required. May also use viral transport media (ARUP supply #12884). Frozen</p>	effective immediately

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Zinc, Urine Quantitative	UZINCQ	<p><b>Special Information: Patient Prep:</b> High concentrations of iodine may interfere with testing. 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. Urine transported in a non-trace element-free tube or contaminated with iodine, gadolinium, blood, fecal material or acid preservative will be rejected. This test is New York DOH approved.</p> <p><b>Clinical Information: This test may be useful as an indicator of acute toxicity.</b> Zinc is predominantly eliminated in the feces. Elevated urine zinc may suggest excessive zinc supplementation but should be interpreted with a corresponding serum or plasma zinc concentration.</p> <p><b>Specimen Requirement:</b> 8 mL from 24-hour (well-mixed) urine in plastic container; Refrigerate during collection. <b>Patient Prep: High concentrations of iodine may interfere with testing.</b> 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b></p> <p><b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen. *OR* 8 mL random urine in plastic container; Refrigerated; <b>Patient Prep: High concentrations of iodine may interfere with testing.</b> 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). <b>Avoid iodinated or gadolinium-based contrast media for at least 72 hours or 14 days for patients with impaired kidney function.</b> <b>Collection:</b> Collect in a plastic container, mix well and aliquot into a trace metal free transport tube (ARUP #43116). Record total volume and collection time interval on specimen.</p>	5/25/23
Zonisamide	ZONIS	<p><b>Special Information: Collect specimen immediately prior to next dose.</b></p> <p><b>Clinical Information: Monitor therapeutic administration of zonisamide.</b></p> <p><b>Specimen Requirement:</b> 2 mL plasma from lithium heparin (Green) <b>no-gel</b> tube; Refrigerated; <b>Do not collect in a gel separator tube.</b> Centrifuge and <b>transfer the plasma to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature. *OR* 2 mL serum from no additive (Red) tube; Refrigerated; <b>Do not collect in a gel separator tube. Centrifuge and transfer the serum to a plastic CCL tube within 2 hours of collection and refrigerate.</b> Transport and store at refrigerated temperature.</p> <p><b>Stability:</b>            Ambient: <b>After separation from cells: 24 hours</b>            Refrigerated: <b>After separation from cells: 14 days</b>            Frozen: <b>After separation from cells: 30 days</b></p> <p><b>Methodology: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)</b></p> <p><b>Days Performed: Mon-Sat</b></p> <p><b>Reported: 1-3 days</b></p>	5/23/23

## New Tests

Test Name	Order Code	Change	Effective Date
Epstein-Barr Virus by Qualitative PCR, CSF	CSFEBV	<p><b>Note: New test was announced in the February update, but financial information was not available at that time</b></p> <p><b>CPT:</b> 87798</p> <p><b>Price:</b> \$105.00</p>	effective immediately
RBC Folate (Reference Lab Only, Requires Hematocrit within 24 hours)	RBCFLR	<p><b>Includes:</b> Hematocrit (client provided) Folate, RBC</p> <p><b>Special Information:</b> Provide result of hematocrit test drawn 24 hours or less from this RBC folate draw. Patient cannot have received a transfusion or experienced excessive bleeding between the hematocrit draw and this RBC folate draw. Critical frozen and must be protected from light during collection, storage and shipment. Separate specimens must be submitted when multiple tests are ordered. Specimens that are clotted or non-frozen will be rejected. This test is New York DOH approved.</p> <p><b>Clinical Information:</b> This test is useful in the detection of folate deficiency.</p> <p><b>Specimen Requirement:</b> 1 mL whole blood in EDTA (Lavender) tube; Minimum 1 mL; Critical Frozen; Protect from light during collection, storage, and shipment. Mix specimen well. Transfer 1 mL whole blood into an amber transport tube and freeze. Separate specimens must be submitted when multiple tests are ordered. Provide result of hematocrit test drawn 24 hours or less from this RBC folate draw. Patient cannot have received a transfusion or experienced excessive bleeding between the hematocrit draw and this RBC folate draw.</p> <p><b>Stability:</b> Ambient: 2 hours Refrigerated: 4 hours Frozen: 2 months</p> <p><b>Methodology:</b> Quantitative Chemiluminescent Immunoassay</p> <p><b>Days Performed:</b> Sun–Sat</p> <p><b>Reported:</b> 2–3 days</p> <p><b>CPT:</b> 82747</p> <p><b>Price:</b> \$30.00</p>	effective immediately
Triglycerides Body Fluid with Reflex to Chylomicron Electrophoresis	FTCHYL	<p><b>Note: New test was announced in the March update, but financial information was not available at that time</b></p> <p><b>CPT:</b> 84478</p> <p><b>Price:</b> \$32.00</p>	effective immediately

## Fee Reductions

Test Name	Order Code	List Fee	CPT Code	Effective Date
Hypercoagulation Diagnostic Interpretive Panel	HYPER	\$846.00	86147x3; 85610x1; 85730x1; 85384x1; 85303x1; 86140x1; 81240x1; 85390x1; 85670x1; 85520x1; 85730x1	5/2/23

## Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
Bordetella pertussis Ab, IgG by ELISA, reflex to IB	BPGESA	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis Ab, IgM reflex IB	BPMESSA	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis Antibody, IgA by Immunoblot	BPAA	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis Antibody, IgG by Immunoblot	BPAG	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis Antibody, IgM by Immunoblot	BPAM	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis IgA and IgG Reflex IB	BPIAG	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis IgA, IgG, IgM	BPPABS	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Bordetella pertussis IgG and IgM with Reflex IB	BPIMG	Test will no longer be orderable. There is no direct replacement. If pertussis is suspected a nasopharyngeal swab should be ordered using Bordetella pertussis and parapertussis DNA, Nucleic Acid Amplification, Nasopharyngeal Swab (BORAMP).	6/20/23
Cadmium Exposure Panel, OSHA	CADEXR	Test will no longer be orderable. Recommended replacement tests are Cadmium, Urine (URCAD), Cadmium, Whole Blood (CADMWB) and Beta-2-Microglobulin, Urine (URB2M).	5/25/23
Enterovirus PCR CSF	ENTPCR	Test will no longer be orderable. Recommended replacement test is Meningitis Encephalitis Panel (MGEBF).	5/23/23
Galactose-alpha-1,3-galactose IgE	13GAL	Test will no longer be orderable. Recommended replacement test is Allergen, Alpha-Gal Component IgE (ALPHAG).	4/6/23
Inhibin A (Dimer) and Inhibin B, Tumor Markers, Serum	INHABP	Test will no longer be orderable. Recommended replacements are individual tests Inhibin A (INHIBA) and Inhibin B (INHIBB).	5/23/23
Legionella Culture.	LEGCUL	Test will no longer be orderable. Recommended replacement test is Legionella Species Detection and Limited Differentiation by Multiplex Real-Time PCR (LEGPCR).	5/23/23
Parainfluenza 1,2,3 Abs	PAR123	Test will no longer be orderable. Recommended replacement test is Respiratory Panel by PCR (RPPCR).	5/1/23