Cleveland Clinic

Cleveland Clinic Laboratories

Technical Update • August 2025

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. 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 Laboratory Customer Service at 216.444.5755 or 800.628.6816, or via email at 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
15	5-Methyltetrahydrofolate				■								
3	Aluminum, Serum		■			■	■						
3	Anti-cN-1A (NT5c1A) IBM					■	■			■	■	■	
3–4	Arsenic, Whole Blood		■			■	■						
4	AST											■	
4	BAL, Routine							■					
4	Cadmium, Whole Blood					■	■						
4	Cell Count/Diff, Body Fluid							■					
13	Cenobamate (Xcopri), Plasma			■									
4	Cholesterol, Total											■	
5	Chromium, Serum					■	■						
5	CO2											■	
5	Cobalt, Plasma		■			■	■						
5	Cobalt, Whole Blood		■			■	■			■	■		
6	Comprehensive Metabolic Panel											■	
6	Cryptococcus antigen screen and titer by LFA		■			■		■					
6	CSF, Cell Count and Diff							■					
7	Cytomegalovirus (CMV) DNA, Qualitative PCR, Non-Plasma											■	
15	Drug Detection Panel, TOF-MS, Umbilical Cord Tissue				■								

Test Update Page #		Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT
7–8	Drug Detection Panel and THC Metabolite, Meconium, Qualitative		■			■		■			■		■
13–14	Enteric Viral Panel by PCR			■									
8–9	Expanded Respiratory Pathogen Panel by PCR, Lower Respiratory		■			■	■	■					
15	Fluid Hematocrit				■								
15	Fluid Hemoglobin				■								
15	Flunitrazepam Screen, Urine				■								
9	Glucose											■	
9	HDL Cholesterol											■	
9	HTLV I/II DNA PCR						■						
9	LDL Cholesterol, Direct											■	
15	Marijuana Metabolite, Umbilical Cord Tissue, Qualitative				■								
9–10	Mercury, Blood					■	■		■				
15	Neopterin, CSF				■								
15	Neurotransmitter Metabolites/Amines				■								
10	Nickel, Serum					■	■						
15	Pyridoxal 5 phosphate, CSF				■								
10–11	Selenium, Plasma		■			■	■						
11	Streptococcus pneumoniae Antigen, Urine	■					■						
15	Succinyladenosine, CSF				■								
11	Synovial Fluid, Routine Analysis							■					
15	Tetrahydrobiopterin & Neopterin, CSF				■								
11	Thallium, Blood					■	■						
11–12	Thymidine and Deoxyuridine Analytes (Plasma)		■			■	■	■	■	■		■	
12	Toxicology Screen, Urine					■							
14	Urine Qualitative Drug Detection Panel by LC-MS/MS												■
12–13	Yeast Susceptibility Testing		■			■	■						

Test Changes

Test Name	Order Code	Change	Effective Date
Aluminum, Serum	ALUM	**Name:** Previously Aluminum **Special Information: Patient Prep:** Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube. Serum that takes longer than two hours to aliquot or is collected or transported in containers other than specified will be rejected.** This test is New York DOH approved. **Specimen Requirement:** 2 mL serum from no additive (**Royal** Blue) tube; Ambient; **Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician).** Carefully clean skin with an alcohol swab prior to collection. Use powderless gloves. Remove serum from cells ASAP or within 2 hours of collection and aliquot into a trace metal-free transport tube (ARUP #43116). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** **Stability:** Ambient: **After separation from cells:** Indefinitely Refrigerated: **After separation from cells:** Indefinitely Frozen: **After separation from cells:** Indefinitely **Methodology: Inductively Coupled Plasma / Mass Spectrometry (ICP-MS)**	effective immediately
Anti-cN-1A (NT5c1A) IBM	CN1AAB	**Special Information:** Grossly hemolyzed, lipemic or icteric specimens will be rejected. **Specimen Requirement:** 2 mL serum from no additive (Red) tube; Refrigerated; Separate serum from cells ASAP or within **1** hour of collection **and** transfer to standard aliquot tube. **Additional specimens must be submitted when multiple tests are ordered.** *OR* 2 mL serum from serum separator (Gold) tube; Refrigerated; Separate serum from cells ASAP or within **1** hour of collection **and** transfer to standard aliquot tube. **Additional specimens must be submitted when multiple tests are ordered.** **Stability:** Ambient: 7 days Refrigerated: 14 days Frozen: 60 days **(1 freeze/thaw cycle)** **Reference Range:** **Negative: <20** **Weak Positive: 20–39** **Moderate Positive: 40–80** **Strong Positive: >80** **Days Performed: Varies** **Reported: 8–11** days	9/16/25
Arsenic, Whole Blood	ASB	**Name:** Previously Arsenic, Blood **Special Information:** Patient demographics (Heavy Metals) form is required to meet State Health Department requirements. Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician) and avoid shellfish and seafood for 48 to 72 hours. **Clotted specimens or** specimens transported in containers other than royal blue **(K2EDTA)** or trace element-free transport tubes will be rejected. This test is New York **state** approved. **Clinical Information: This test may be useful for the detection of recent (<24 hours after exposure) and/or large dose arsenic exposures.** Potentially toxic ranges **for blood arsenic:** Greater than or equal to 600 ug/L. Blood arsenic is for the detection of recent exposure poisoning only. Blood arsenic levels in healthy subjects vary considerably with exposure to arsenic in the diet and the environment. A 24-hour urine arsenic is useful for the detection of chronic exposure. Elevated results may be due to skin- or collection-related contamination, including the use of **tubes that are not certified to be trace element free. If an elevated result is suspected to be due to contamination,** confirmation with a second specimen collected in a certified trace element-free tube is recommended. *(continued on page 4)*	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Arsenic, Whole Blood *(continued from page 3)*		**Specimen Requirement:** 7 mL whole blood in EDTA (Royal blue) tube; Ambient; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. 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. Send blood in original **collection** tube.	
AST	AST	**Stability:** Ambient: **4 days** Refrigerated: 7 days Frozen: **3 months**	effective immediately
BAL, Routine	BALAVI	**For interface clients only–Test build may need to be modified** **Reference Range:** BAL, Routine: Refer to report BAL reference ranges: No reference ranges established RBC, BAL: Reference range not established Total Nucleated Cells, BAL: Reference range not established **Note:** *New Monocytes/Macrophages component added*	9/16/25
Cadmium, Whole Blood	CADM	**Special Information:** Patient demographics form (Heavy Metal Form) is required to meet State Health Department requirements. Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications (upon the advice of their physician). Always use an alcohol swab to cleanse the venipuncture site. Avoid iodine-containing disinfectants. Use only stainless-steel phlebotomy needles and non-powder gloves when handling and collecting. **Clotted specimens or** specimens transported in **containers** other than royal blue **(K2EDTA)** or trace element-free transport tubes will be rejected. This test is New York **state** approved. **Clinical Information:** Blood cadmium can be used to monitor acute toxicity, and in combination with cadmium and urine and B-2 microglobulin is the preferred method for monitoring occupational exposure. 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. Elevated results may be due to skin- or collection-related contamination, including the use of **tubes that are not certified to be trace element free. If an elevated result is suspected to be due to contamination,** confirmation with a second specimen collected in a certified trace element-free tube is recommended. **Specimen Requirement:** 7 mL whole blood in EDTA (Royal blue) tube; Ambient; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). Send **blood** in original **collection** tube.	effective immediately
Cell Count/Diff, Body Fluid	CCBF	**For interface clients only–Test build may need to be modified** **Reference Range:** Body fluid RBC: <2000 cells/uL Body fluid TNC: <1000 cells/uL Neutrophils: 0-1 % Color, BF: Yellow Lymphocytes: 18-36 % Mesothelials: 0-2 % Supernatant Clarity, BF: Clear Supernatant Color, BF: Yellow **Monocytes/Macrophages: 64-80 %**	9/16/25
Cholesterol, Total	CHOL	**Stability:** Ambient: **7** days Refrigerated: After separation from cells: 7 days Frozen: After separation from cells: **3 months**	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Chromium, Serum	CHRSER	**Special Information:** Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** Unacceptable conditions: **Serum that takes longer than two hours to aliquot or is collected or transported in containers other than specified will be rejected.** This test is New York DOH approved. **Specimen Requirement:** 2 mL serum from no additive (**Royal** Blue) tube; Ambient; **Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician).** Remove serum from cells ASAP or within 2 hours of collection and aliquot into a trace metal-free transport tube (ARUP #43116). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** **Stability:** Ambient: **After separation from cells:** Indefinitely Refrigerated: **After separation from cells:** Indefinitely Frozen: **After separation from cells:** Indefinitely **Days Performed: Sun–Sat**	effective immediately
CO2	CO2	**Stability:** Ambient: 40 hours Refrigerated: 7 days Frozen: **6 months**	effective immediately
Cobalt, Plasma	COBALT	**Name:** Previously Cobalt, Serum or Plasma **Special Information:** 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). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** Specimens collected and/or transported in containers other than **royal blue EDTA** will be rejected. This test is New York DOH approved. **Specimen Requirement:** 2 mL plasma from EDTA (Royal blue) tube; Ambient; Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals and non-essential over-the-counter medications (upon the advice of their physician). **Separate** plasma from cells ASAP or within 2 hours of collection and aliquot into a trace-metal free transport tube (ARUP #43116). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** **Stability:** Ambient: **After separation from cells:** Indefinitely Refrigerated: **After separation from cells:** Indefinitely Frozen: **After separation from cells:** Indefinitely	effective immediately
Cobalt, Whole Blood	COBALB	**Name:** Previously Cobalt, Blood **Special Information: Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician).** Specimens collected and/or transported in containers other than **royal blue (K2EDTA)** will be rejected. Clotted specimens are unacceptable. **This test is New York DOH approved.** **Clinical Information:** Blood cobalt levels can be used in the assessment of occupational exposure or toxic ingestion. Symptoms associated with cobalt toxicity vary based on route of exposure and may include cardiomyopathy, allergic dermatitis, pulmonary fibrosis, cough, and dyspnea. Blood is the preferred specimen type for evaluating metal ion release from metal-on-metal joint arthroplasty. Elevated results may be due to **skin-** or collection-related contamination, including the use of **tubes that are not certified to be trace element free. If an elevated result is suspected to be due to contamination,** confirmation with a second specimen collected in a certified **trace element-free** tube is recommended. **Specimen Requirement: 7** mL whole blood in EDTA (Royal blue) tube; Ambient; Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over the counter medications (upon the advice of their physician). **Send blood** in original collection tube. **Reference Range: Less than or equal to 3.9** **Reported:** 2–**4** days	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Comprehensive Metabolic Panel	CMP	**Stability:** Ambient: 8 hours Refrigerated: after separation from cells: 72 hours Frozen: after separation from cells**: 2** months	effective immediately
Cryptococcus antigen screen and titer by LFA	CAD	**For interface clients only–Test build may need to be modified** **Name:** Previously Cryptococcal antigen screen and titer by LFA **Includes:** **Cryptococcus antigen Screen, Serum** **Cryptococcus antigen Screen, CSF** **Cryptococcus antigen titer, Serum** **Cryptococcus antigen titer, CSF** **Special Information:** The Cryptococcal antigen lateral flow assay is a dipstick immunochromatographic assay. The test utilizes specimen wicking up the membrane to interact with capture gold-conjugated anti-CrAG antibodies. The antibody-antigen complex continues to wick up the membrane and interact with test line which has the immobilized anti-CrAg monoclonal antibodies. The antibody-antigen complex forms a visible line at the "test line". In order to report a test positive, a visible line is also needed at the "control line" which ensures proper migration of the specimen through the membrane. Thus, positive test results will create two lines (test and control), negative test results will only form one line (control). Test may result as invalid if a control line does not develop. Semi-quantitative titration procedures are employed with an initial positive or if there is an extremely faint line to rule out false negative results from high titer specimens (hook effect/postzone). If Cryptococcal Antigen Detection is positive, a titer will be performed at an additional charge with CPT code 87899 applied. If Cryptococcal Antigen Detection is positive **in CSF,** fungal culture **CSF** will be reflexed. **Clinical Limitation:** Testing is limited CSF and serum specimens only. **Antigen screen (positive/negative) are performed across all shifts, Cryptococcus titer results are only performed during 7am-4pm.** CSF specimens submitted for initial diagnosis that test positive by the lateral flow assay, should also be submitted for routine fungal culture. Culture can aid in differentiating between the 2 common Cryptococcus species causing disease (Cryptococcus neoformans and Cryptococcus gattii) and can be used for antifungal susceptibility testing, if necessary. CAD test should not be used as a screening procedure for the general population. This test should not be used as a test of cure or to guide treatment decisions. Bloody lumbar puncture and/or contamination of the cerebrospinal fluid (CSF) specimen with serum, other yeast infections such as Trichosporon may lead to a positive Cryptococcus antigen result. CAD titers can be utilised to monitor therapy but titers acquired by different assays are not interchangeable; titers acquired by lateral flow assay may be higher than other antigen assays such as agglutination tests. Extremely high concentrations of cryptococcal antigen can result in negative CAD results. If high burden is suspected, sample may be diluted to resolve false negative. Please call the lab/medical director in such instances.	8/19/25
CSF, Cell Count and Diff	CCCSF	**For interface clients only–Test build may need to be modified** **Reference Range:** Neutrophils:<3 % Lymphocytes: 50-90 % Supernatant Clarity, CSF: Clear Supernatant Color, CSF: Colorless Mesothelials: 0-2 % Supernatant Clarity, BF: Clear Supernatant Color, BF: Yellow **Monocytes/Macrophages: 10–50 %**	9/16/25

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Cytomegalovirus (CMV) DNA, Qualitative PCR, Non-Plasma	CMVQL	**Specimen Requirement:** 3 mL saliva in Universal Transport Media (UTM); Refrigerated; Saliva swab specimens are only accepted from infants less than 21 days of age. Obtain a regular-tip flocked swab and tube containing 3 mL Universal Transport Medium (Oracle #1063581). Confirm that the infant has not been fed with human milk within the 1 hour before specimen collection. Infant can be held or remain in the bassinet for specimen collection. Wash hands and put gloves on. Remove the sterile flocked swab from its wrapping. Place the swab between the baby's cheek and gum on one side of the mouth. Keep the swab in place for 10-15 seconds. Move the swab to the other side of the mouth for another 10-15 seconds. Make sure the swab appears moist when removed. Remove the swab from the mouth and insert it into the UTM tube. Break off the swab tip. Close the cap. *OR* 5 mL random urine in sterile container; Refrigerated; Collect or transfer 5 mL of urine into a sterile, plastic, preservative-free container. **Stability:** Ambient: 48 hours for saliva swab in UTM; **5 days** for neat urine; 90 days for urine stabilized in cobas PCR media Refrigerated: 7 days for saliva swab in UTM; **5 days** for neat urine; 90 days for urine stabilized in cobas PCR media Frozen: 14 days for saliva swab in UTM; Not acceptable for urine	effective immediately
Drug Detection Panel and THC Metabolite, Meconium, Qualitative	MECDRG	**For interface clients only–Test build may need to be modified** **Name:** Previously Drug Detection Panel, Meconium, Qualitative **Includes:** Buprenorphine Norbuprenorphine Naloxone Codeine Dihydrocodeine Fentanyl Hydrocodone Norhydrocodone Hydromorphone Meperidine Methadone Methadone metabolite 6-Acetylmorphine Morphine Methylphenidate Oxycodone Noroxycodone Oxymorphone Tapentadol Tramadol N-desmethyltramadol O-desmethyltramadol Gabapentin Amphetamine Benzoylecgonine m-OH-Benzoylecgonine Cocaethylene Cocaine MDMA (Ecstasy) Methamphetamine Phentermine Alprazolam Alpha-OH-Alprazolam Butalbital Clonazepam 7-Aminoclonazepam Diazepam Lorazepam Midazolam Alpha-OH-Midazolam Nordiazepam Oxazepam Phenobarbital Temazepam *(continued on page 8)*	8/26/25

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Drug Detection Panel and THC Metabolite, Meconium, Qualitative *(continued from page 7)*	MECDRG	**Includes (continued):** Zolpidem Phencyclidine (PCP) Mitragynine (Kratom) **Carboxy-THC** **Clinical Limitation: This test does not distinguish between the delta-8 and delta-9 forms of THC or their metabolites.** **Methodology:** Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) **Reported:** 2–**5** days **CPT:** 80323/G0480; 80325/G0480; 80345/G0480; 80346/G0480; 80348/G0480; **80349/G0480**; 80353/G0480; 80354/G0480; 80355/G0480; 80356/G0480; 80358/G0480; 80359/G0480; 80360/G0480; 80361/G0480; 80362/G0480; 80365/G0480; 80368/G0480; 80372/G0480; 80373/G0480; 83992/G0480	8/26/25
Expanded Respiratory Pathogen Panel by PCR, Lower Respiratory	RPPCR	**For interface clients only–Test build may need to be modified** **Name:** Previously Expanded Respiratory Pathogen Panel by PCR, Routine **Includes:** Adenovirus Coronavirus 229E Coronavirus HKU1 Coronavirus NL63 Coronavirus OC43 SARS-CoV-2 Human Metapneumovirus Human Rhinovirus/Enterovirus Influenza A virus Influenza A virus A/H1 Influenza A virus A/H3 Influenza A virus A/H1-2009 Influenza B virus Parainfluenza virus 1 Parainfluenza virus 2 Parainfluenza virus 3 Parainfluenza virus 4 Parainfluenza virus 4 Chlamydia pneumoniae Mycoplasma pneumoniae Influenza A (no subtype) **Note:** *Bordetella parapertussis and Bordetella pertussis have been removed* **Special Information: This test order is intentionally restricted to only lower respiratory specimens.** Patients who may benefit include immunocompromised patients and those **who are critically ill.** The test is very expensive, and if not covered by insurance, the patient will incur a substantial charge. Recommend discussing risks and benefits with the patient, and considering seeking insurance preauthorization. **Clinical Limitation:** For full limitations, refer to the assay instructions for use available on the manufacturer's website. The most important limitations are summarized as follows. Recent administration of intranasal vaccines (ie. FluMist) may lead to false positive results. As with any nucleic acid amplification test, positive results do not rule out coinfection with other organisms, detected organisms may not be the definite cause of disease, and negative results do not rule out infection. Some patients may experience financial toxicity with this expanded multiplex panel, as it is variably reimbursed by insurance. **Clinical Information:** Respiratory pathogens cause acute local and systemic disease, with the most severe cases occurring in children, the elderly, and immunocompromised individuals. Due to the similarity of diseases caused by many viruses and bacteria, diagnosis based on clinical symptoms alone is difficult. Identification of potential causative agents provides data to aid providers in determining appropriate patient treatment or triage, and public health response for disease containment. *(continued on page 9)*	9/16/25

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Expanded Respiratory Pathogen Panel by PCR, Lower Respiratory *(continued from page 8)*	RPPCR	The BioFire Respiratory Panel 2.1 (RP2.1) is a multiplexed nucleic acid test that qualitatively detects and identifies nucleic acids from the following viral and bacterial targets from respiratory specimens: SARS-CoV-2 (Agent of COVID-19); Influenza A and subtypes H1, H1N1 2009, H3; Influenza B; Respiratory syncytial virus (RSV); Human metapneumovirus (hMPV); Human rhinovirus/enterovirus; Adenovirus; Parainfluenza 1-4; Coronaviruses 229E, OC43, NL63, HKU1; Chlamydia pneumoniae; **and** Mycoplasma pneumoniae. **B. pertussis and parapertussis targets are not reported for lower respiratory specimens.** These respiratory pathogens are assayed in a single pouch through array-based localization and endpoint melting curve data analysis. The assay is FDA-cleared for nasopharyngeal swab testing, and has been modified and validated as a lab-developed test for lower respiratory specimens including bronchoalveolar lavage, sputum, and tracheal aspirate. **Specimen Requirement:** 1 mL bronch (BAL) in sterile container; Refrigerated; Collect 2-3 mL into a sterile, leak-proof, screw-cap collection cup or sterile dry container (i.e. Oracle 1619591). If aliquotting is necessary, sterile aliquot tubes must be used. Do not dilute with transport media. *OR* 1 mL induced sputum in sterile container; Refrigerated; Before collecting a sputum, have the patient rinse their mouth with water and discard the rinse fluid. Ask the patient to breathe deeply for three or four breaths, then hold their breath and expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap collection cup or sterile dry container (i.e. Oracle 1619591). Induced sputum is also acceptable. If aliquotting is necessary, sterile aliquot tubes must be used. Do not dilute with transport media. *OR* 1 mL tracheal aspirate in sterile container; Refrigerated; Collect 2-3 mL into a sterile, leak-proof, screw-cap collection cup or sterile dry container (i.e. Oracle 1619591). If aliquotting is necessary, sterile aliquot tubes must be used. Do not dilute with transport media. **Note:** *Naspphararyngeal swab is no longer acceptable* **Stability:** Ambient: 24 hours Refrigerated: 7 days Frozen: 30 days	9/16/25
Glucose	GLU	**Stability:** Ambient: 8 hours Lithium Heparin Plasma (Lt. green)**, Removed from Cells** or 24 hours Fluoride Plasma (Gray) Refrigerated: **3 days Lithium Heparin Plasma (Lt. green)/Fluoride Plasma (Gray), Removed from Cells** Frozen: **3 months**	effective immediately
HDL Cholesterol	HDL1	**Stability:** Ambient: **3** days Refrigerated: After separation from cells: 7 days Frozen: After separation from cells: **3 months**	effective immediately
HTLV I/II DNA PCR	HTLV12	**Specimen Requirement:** 1 mL whole blood in EDTA (Lavender) tube; Frozen; Separate specimens must be submitted when multiple tests are ordered. **Note:** *ACD A or B (Yellow) tube is no longer acceptable*	effective immediately
LDL Cholesterol, Direct	LDLDCT	**Stability:** Ambient: 8 hours Refrigerated: After separation from cells: 7 days Frozen: After separation from cells: **12 months**	effective immediately
Mercury, Blood	MERC2	**Special Information:** Patient demographics (Heavy Metals) form is required to meet State Health Department requirements. Indications: Toxicity-Mercury poisoning. 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 48–72 hours. Specimens collected or transported in tubes other than royal blue (EDTA) or trace element-free transport tubes will be rejected. Clotted specimens are not acceptable. This test is New York DOH approved. *(continued on page 10)*	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Mercury, Blood *(continued from page 9)*		**Clinical Information:** Preferred test for the assessment of acute mercury exposure. Blood mercury levels predominantly reflect recent exposures, and they are most useful in the diagnosis of acute poisoning as blood mercury concentrations rise sharply and fall rapidly over several days after ingestion. Blood concentrations in unexposed individuals rarely exceed 20 ug/L. The reference interval relates to inorganic mercury concentrations. Dietary and nonoccupational exposure to organic mercury forms may contribute to an elevated total mercury result. Clinical presentation after toxic exposure to organic mercury may include dysarthria, ataxia and constricted vision fields with mercury blood concentrations from 20 to 50 ug/L. Elevated results may be due to skin- or collection-related contamination, including the use of **tubes that are not certified to be trace element free. If an elevated result is suspected to be due to contamination,** confirmation with a second specimen collected in a certified **trace element-free** tube is recommended. Mercury is volatile; concentration may decrease over time. **Specimen Requirement:** 7 mL whole blood in EDTA (Royal blue) tube; Ambient; HEAVY METALS FORM REQUIRED to meet State Health Department requirements. 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. Send blood in original collection tube. **Methodology:** Inductively Coupled Plasma / Mass Spectrometry (ICP-MS)	
Nickel, Serum	NICKEL	**Special Information: Patient Prep:** Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube. Serum that takes longer than two hours to aliquot or is collected or transported in containers other than specified will be rejected. This test is New York DOH approved.** **Clinical Information:** Serum nickel testing is intended to detect potentially toxic exposure. **Elevated results may be due to skin- or collection-related contamination, including the use of a noncertified metal-free collection/transport tube. If contamination concerns exist due to elevated levels of serum nickel, confirmation with a second specimen collected in a certified metal-free tube is recommended.** **Specimen Requirement:** 2 mL serum from no additive (**Royal** Blue) tube; Ambient; **Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician).** Separate serum from cells within 2 hours of collection and aliquot into a trace metal-free transport tube (ARUP # 43116). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** **Methodology: Inductively Coupled Plasma / Mass Spectrometry (ICP-MS)**	effective immediately
Selenium, Plasma	PSELEN	**Name:** Previously Selenium, Plasma or Serum **Special Information:** 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). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube. Serum that takes longer than two hours to aliquot or is collected or transported in containers other than specified will be rejected.** This test is New York DOH approved. **Clinical Information: This test may be useful in the assessment of recent intake.** Serum selenium levels can be used in the determination of deficiency or toxicity. Plasma and serum contain 75 percent of the selenium measured in whole blood and reflects recent dietary intake. Selenium deficiency can occur endemically or as a result of sustained TPN or restricted diets and has been associated with cardiomyopathy and may exacerbate hypothyroidism. Selenium toxicity is relatively rare. Excess intake of selenium can result in symptoms consistent with selenosis **and include** gastrointestinal upset, hair loss, white blotchy nails, and mild nerve damage. Elevated results may be due to contamination from skin or other collection-related issues, including the use of a noncertified metal-free collection/transport tube. If contamination concerns exist due to elevated levels of serum/plasma selenium, confirmation with a second specimen collected in a certified metal-free tube is recommended. *(continued on page 11)*	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Selenium, Plasma *(continued from page 10)*		**Specimen Requirement:** 2 mL plasma from EDTA (Royal blue) tube; Ambient; Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). Separate plasma from cells ASAP or within 2 hours of collection and aliquot into a trace metal-free transport tube (ARUP #43116). **Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.** **Stability:** Ambient: **After separation from cells:** Indefinitely Refrigerated: **After separation from cells:** Indefinitely Frozen: **After separation from cells:** Indefinitely	
Streptococcus pneumoniae Antigen, Urine	USTREP	**Order Code:** Previously SPNAG **Specimen Requirement:** 2 mL random urine in clean, **leakproof** container; Refrigerated; Preferred specimen is urine collected in a clean or sterile leak-proof container. Boric acid preserved urine is also acceptable. Urine received in other preservatives will be rejected. Transport temperature: refrigerated or frozen is acceptable. Specimens transported at ambient temperature must be delivered to Microbiology within 24 hours. *OR* **1–5 mL random urine in gray boric acid urine culture tube; Collect Ambient; Transport Refrigerated; Urine received in other preservatives will be rejected. Transport temperature: refrigerated or frozen is acceptable. Specimens transported at ambient temperature must be delivered to Microbiology within 24 hours even in preservative.** **Methodology:** Immunochromatography **Reference Range:** **Streptococcus pneumoniae antigen, urine:** Negative	9/18/25
Synovial Fluid, Routine Analysis	RTSYNF	**For interface clients only–Test build may need to be modified** **Reference Range:** Synovial Fluid, Routine Analysis: Refer to report Synovial fluid RBC: <2000 cells/uL Synovial fluid TNC: 0-200 cells/uL Neutrophils: <25 % Crystals: None **Note:** *New Monocytes/Macrophages component added*	9/16/25
Thallium, Blood	THALL	**Special Information: Patient Prep:** Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician). Specimens collected or transported in tubes other than royal blue (EDTA) or trace element-free transport tube will be rejected. Clotted specimens will be rejected. This test is New York DOH approved. **Specimen Requirement:** 7 mL whole blood in EDTA (Royal blue) tube; Ambient; **Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician).** Send blood in original collection tube.	effective immediately
Thymidine and Deoxyuridine Analytes (Plasma)	PLTHY	**For interface clients only–Test build may need to be modified** **Name:** Previously Plasma Thymidine Determination **Special Information: Thawed samples will be rejected.** **Clinical Information:** Plasma Thymidine/Deoxyuridine analyte is used for diagnosis of Mitochondrial neurogastrointestinal encephalomyopathy (MNGIE). MNGIE is an autosomal recessive disorder caused by mutations in the gene encoding thymidine phosphorylase (TP). The disease is characterized clinically by impaired eye movements, gastrointestinal dysmotility, cachexia, peripheral neuropathy, myopathy and leukoencephalopathy. Molecular genetic studies of MNGIE patients\tissues have revealed multiple deletions, depletion, and site-specific point mutations of mitochrondrial DNA. TP is a cytosolic enzyme required for nucleoside homeostatis. In MNGIE, TP activity is severely reduced and consequently levels of thymidine and deoxyuridine in plasma are dramatically elevated. MNGIE patients may benefit from hematopoietic stem cell transplantation. *(continued on page 12)*	8/26/25

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Thymidine and Deoxyuridine Analytes (Plasma) *(continued from page 11)*		**Specimen Requirement:** 1 mL plasma from sodium heparin (Green) tube; Frozen ASAP; Separate plasma from cells ASAP and transfer **to** standard aliquot tube and freeze. *OR* 1 mL plasma from EDTA (Lavender) tube; Frozen ASAP; Separate plasma from cells ASAP and transfer **to** standard aliquot tube and freeze. *OR* 1 mL plasma from ACDA or B (Yellow) tube; Frozen ASAP; Separate plasma from cells ASAP and transfer **to** standard aliquot tube and freeze. **Stability:** Ambient: **After separation from cells:** Unacceptable Refrigerated: After separation from cells: 24 hours Frozen: After separation from cells: **Indefinitely** **Methodology: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)** **Reference Range:** Plasma Thymidine Result: Refer to report	
Toxicology Screen, Urine	UTOX2	**Clinical Information: Immunoassay screen only. Cross reactivity with other substances can occur with immunoassay screening. Detection of any drug(s) in the urine toxicology panel is presumptive only. These tests are for medical purposes only and** should not be used for compliance monitoring, **legal, or forensic use.**	effective immediately
Yeast Susceptibility Testing	FUNSUS	**Name:** Previously Fungal Susceptibility–yeast **Special Information: Yeast susceptibility testing requires a pure, actively growing culture; mixed or non-viable isolates may lead to invalid results. Accurate species-level identification is essential, as clinical breakpoints vary by species. Testing may be delayed or limited if identification is not provided or not ordered concurrently. The standard antifungal panel does not include 5-fluorocytosine —if susceptibility to this agent is clinically necessary, please contact the laboratory. MIC interpretations are based on the most recent CLSI guidelines. For antifungal agents lacking established breakpoints, only the MIC value is reported without categorical interpretation. As always, susceptibility results should be interpreted in the context of the patient's clinical condition, site of infection, and therapeutic considerations, since MIC values alone may not fully predict treatment outcomes.** **Clinical Limitation: Antifungal susceptibility results do not always correlate with clinical outcomes, as factors like immune status, infection site, drug pharmacokinetics, and biofilm presence can influence treatment success. CLSI breakpoints are limited to select yeast species and antifungal agents; for others, only MIC values are reported without interpretation. Some yeast species, show variable or dose-dependent susceptibility, complicating interpretation. Testing is performed under standardized conditions and may not reflect in vivo environments and evaluation of MIC may be impacted by methodology. Biofilm-related resistance is not assessed, and results from mixed or contaminated cultures may be unreliable. Additionally, the 24–48 hour turnaround time may delay therapy decisions. Results should be interpreted in the context of the full clinical picture.** **Clinical Information: This test determines the antifungal susceptibility of rapidly growing, non-fastidious yeast isolates—including Candida and Cryptococcus—to a comprehensive panel of antifungal agents. It is performed on pure yeast cultures to support clinical decision-making and guide patient management. Susceptibility testing follows Clinical and Laboratory Standards Institute (CLSI) guidelines, using established breakpoints and interpretive criteria. The antifungal agents tested include amphotericin B, anidulafungin, caspofungin, fluconazole, isavuconazole, itraconazole, micafungin, posaconazole, rezafungin, and voriconazole. Note that 5-fluorocytosine is not included in this panel. Fluconazole and Micafungin will be reported routinely, Amphotericin B will be reported dependent on source. Other antifungals will be reported based on resistance seen to routinely reported antifungals or by request. Testing is performed using the TREK Sensititre™ YeastOne™ YO11 colorimetric microdilution broth method. Each susceptibility plate is pre-loaded with standardized concentrations of antifungal agents and a colorimetric growth indicator. After inoculating the plate with a standardized yeast suspension and incubating at 35°C for 24 to 48 hours (up to 72hours for Cryptococcus species), minimum inhibitory concentrations (MICs) are determined. MICs are identified as the lowest concentration of each antifungal agent that prevents visible yeast growth, as indicated by the absence of color change in the test medium. MIC values are interpreted using clinical breakpoints to categorize isolates as susceptible, intermediate, susceptible-dose dependent, or resistant, in accordance with current guidelines from the Clinical and Laboratory Standards Institute (CLSI). When CLSI has not established clinical breakpoints for a specific antifungal agent, only the MIC value is reported without an interpretive category. For further information on MIC interpretation and methodology, consult the most recent CLSI documents related to antifungal susceptibility testing of yeasts.** *(continued on page 13)*	8/19/25

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Yeast Susceptibility Testing *(continued from page 12)*	FUNSUS	**Specimen Requirement:** Isolate of organism on agar slant; Ambient; **The organism must be in pure culture and actively growing. Do not submit mixed cultures. Specimen source is required. Organism identification is also required unless a concurrent identification test has been ordered. If an organism identification is not provided an, organism identification, yeast (OIDYEA) will be ordered.** **Stability:** Ambient: **Preferred** Refrigerated: **Acceptable** Frozen: Unacceptable	8/19/25

New Tests

Test Name	Order Code	Change	Effective Date
Cenobamate (Xcopri), Plasma	CNBMTE	**Clinical Information:** This test is useful for therapeutic drug management. **Specimen Requirement:** 2 mL plasma from EDTA (Lavender) tube; Minimum: 0.5 mL; Ambient; Separate plasma from cells and transfer to standard aliquot tube. **Stability:** Ambient: After separation from cells: 14 days Refrigerated: After separation from cells: 14 days Frozen: After separation from cells: 14 days **Methodology:** Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) **Days Performed:** Varies **Reported:** 6–7 days **CPT:** 80299	effective immediately
Enteric Viral Panel by PCR	EVPPCR	**Clinical Limitation:** The BD Max Enteric Viral Panel results are meant to be used in conjunction with clinical presentation, laboratory findings, and epidemiological information. Results of this test should not be used as the sole basis for diagnosis, treatment, or other patient management decisions. Positive results do not rule out co-infection with other organisms that are not detected by this test, and may not be the sole or definitive cause of patient illness. Some targets on this panel have potential for false positives due to non-specific cross reactivity. Negative results in the setting of clinical illness compatible with gastroenteritis may be due to infection by pathogens that are not detected by this test or non-infectious causes such as ulcerative colitis, irritable bowel syndrome, or Crohn's disease. Refer to the manufacturer package insert for full list of limitations. **Clinical Information:** The BD Max Enteric Viral Panel is an FDA-cleared multiplex real-time PCR assay that qualitatively detects nucleic acids from the following targets in stool: Norovirus GI/GII, Rotavirus A, Adenovirus 40/41, Sapovirus (Genogroups I, II, IV, V), and Astrovirus. The Infectious Diseases Society of America recommends stool viral pathogen testing in an outbreak setting and in immunocompromised hosts with diarrhea. Identification of the infectious etiology of diarrheal illness can help guide appropriate therapy, prevent unnecessary or harmful antibiotic exposure, and facilitate further workup. Repeat testing within 14 days of the same episode of diarrhea, or for test of cure, is not recommended. Immunocompromised individuals with persistent diarrhea may additionally benefit from additional testing (ie. SQSTLPCR: Enteric Bacterial by PCR or SQSTLPCR: Expanded Stool Gastrointestinal Panel by PCR, SQOVAP: Stool Ova/Parasite Exam, SQCRYSPO: Cryptosporidium/Cyclospora/Cystoisospora Exam, SQMICSPO: Microsporidia Exam, and gastrointestinal biopsy, among others). Individuals with travel history outside the United States with persistent diarrhea lasting >14 days may benefit from additional parasitic testing (ie. SQOVAP: Stool Ova/Parasite exam, SQCRYSPO: Cryptosporidium/Cyclospora/Cystoisospora exam). Individuals with onset of diarrhea after more than 3 days of hospital admission or with prior antibiotic exposure history may benefit from testing for C. difficile (SQCDPCR). *(continued on page 14)*	9/16/25

New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Enteric Viral Panel by PCR *(continued from page 13)*	EVPPCR	**Specimen Requirement:** One Cary-Blair kit; Refrigerated; The stool must be passed into a clean, dry, wide mouthed container and not contaminated by urine or water. A bed pan is an ideal initial collection container provided it has been thoroughly cleaned and the patient is cautioned against contaminating the specimen with urine. A plastic bag placed over the toilet seat is also acceptable. Select bloody, slimy, or watery portions of the stool using the collection spoon provided in the cap of the container. Place enough stool (~1g) in the Cary-Blair transport vial (Oracle #1124361, or #1570140 as part of STUL kit) to bring the liquid level up to the "fill to here" line. Mash and mix the stool with the spoon along the sides of the container. Tighten the cap and shake the vial until the mixture appears homogeneous. *OR* One sterile container; Refrigerated; The stool must be passed into a clean, dry, wide mouthed container and not contaminated by urine or water. A bed pan is an ideal initial collection container provided it has been thoroughly cleaned and the patient is cautioned against contaminating the specimen with urine. A plastic bag placed over the toilet seat is also acceptable. Select bloody, slimy, or watery portions of the stool using a clean transfer device. Place a minimum of 1g of stool into the sterile container (Oracle #1012787). **Stability:** Ambient: 2 days in Cary-Blair transport media or as unpreserved stool in a sterile container Refrigerated: 5 days in Cary-Blair transport media or as unpreserved stool in a sterile container **Methodology:** Qualitative Polymerase Chain Reaction **Reference Range:** Astrovirus RNA: Not detected Rotavirus A RNA: Not detected Sapovirus (Genogroups I, II, IV, V) RNA: Not detected Adenovirus F 40/41 DNA: Not detected Norovirus GI/GII RNA: Not detected **Days Performed:** 7 days a week **Reported:** 1–3 days **CPT:** 87505	9/16/25
Urine Qualitative Drug Detection Panel by LC-MS/MS	URDRG	**Note:** ***New test was announced in the July update, but financial information was not available at that time.*** **CPT:** 80324/G0480; 80347/G0480; 80348/G0480; 80349/G0480; 80353/G0480; 80354/G0480; 80355/G0480; 80356/G0480; 80357/G0480; 80358/G0480; 80359/G0480; 80361/G0480; 80362/G0480; 80365/G0480; 80366/G0480; 80368/G0480; 80370/G0480; 80373/G0480; 80377/G0480	8/26/25

Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
5-Methyltetrahydro-folate	5MTH	Test will no longer be orderable. There is no recommended replacement test.	9/18/25
Drug Detection Panel, TOF-MS, Umbilical Cord Tissue	DRGTOF	Test will no longer be orderable. Recommended replacement test is Drug Detection Panel, Umbilical Cord Tissue, with Marijuana Metabolite (DTOFMP).	8/26/25
Fluid Hematocrit	FLDHCT	Test will no longer be orderable. Recommended replacement test is Cell Count/Diff, Body Fluid (CCBF).	9/16/25
Fluid Hemoglobin	FLDHGB	Test will no longer be orderable. Recommended replacement test is Cell Count/Diff, Body Fluid (CCBF).	9/16/25
Flunitrazepam Screen, Urine	FLUNU	Test will no longer be orderable. Recommended replacement test is Urine Qualitative Drug Detection Panel by LC-MS/MS (URDRG).	9/16/25
Marijuana Metabolite, Umbilical Cord Tissue, Qualitative	DRGTHC	Test will no longer be orderable. Recommended replacement test is Drug Detection Panel, Umbilical Cord Tissue, with Marijuana Metabolite (DTOFMP).	8/26/25
Neopterin, CSF	NEOCSF	Test will no longer be orderable. There is no recommended replacement test.	9/18/25
Neurotransmitter Metabolites/Amines	NEUR	Test will no longer be orderable. There is no recommended replacement test.	9/18/25
Pyridoxal 5 phosphate, CSF	P5PCSF	Test will no longer be orderable. There is no recommended replacement test.	9/18/25
Succinyladenosine, CSF	CSUCCN	Test will no longer be orderable. There is no recommended replacement test.	9/18/25
Tetrahydrobiopterin & Neopterin, CSF	TBIOPT	Test will no longer be orderable. There is no recommended replacement test.	9/18/25