

Technical Update • May 2026

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	Applies to Regional Locations	CPT
2	AFB Culture & Stain													
2	AFB Culture, Blood and Bone Marrow													
2	Aquaporin-4 Receptor Antibody, IgG by CBA-IFA, CSF with Reflex to Titer													
2	Arsenic, Urine 24 Hr													
2	Autoimmune Pediatric CNS Disorders, CSF													
2	Beta-2-Microglobulin, Urine													
3	C. difficile PCR with Reflex to EIA if Positive													
3	Clostridium difficile Toxin by PCR													
3	Copper and Zinc, Serum or Plasma													
4	Copper, Serum or Plasma													
4	Enteric Viral Panel by PCR													
4	Ethyl Glucuronide, Urine reflex to Confirm/Quant													
4	Fentanyl and Metabolite, Serum or Plasma													
4	Fluvoxamine, Serum and Plasma													
4	Glomerular Basement Membrane IgG Ab, IFA													
4	HCG, Qualitative, Urine													
4	Hepatitis Delta Virus Antibody by ELISA With Reflex to Hepatitis Delta Virus by Quantitative PCR													
7	Hepatitis Delta Virus by Quantitative PCR													

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5	Legionella Species Detection and Limited Differentiation by Multiplex Real-Time PCR											
7	Lipoprotein Fractionation by NMR with Lipids											
5	Ma2/Ta Antibody, IgG CSF											
5	N-methyl-D-Aspartate Receptor (NMDAR) Antibody, IgG, CSF, Reflex to Titer											
5	Organism Identification, AFB											
5-6	Paraneoplastic Autoantibody Evaluation, Serum											
6	Phosphatidylethanol (PEth)											
6	Thyroglobulin, Serum with Reflex to IA or LC-MS/MS											
7	Zinc, Serum or Plasma											

Test Changes

Test Name	Order Code	Change	Effective Date
AFB Culture & Stain	AFC	CPT: 87116x1; 87206x1; 87015x1; 87015x1; 87118x1; 87153x1; 87186x1; 87176x1; 87015x1; 87150x1	effective immediately
AFB Culture, Blood and Bone Marrow	AFCO	CPT: 87116x1; 87118x1; 87186x1; 87153x1; 87150x1	effective immediately
Aquaporin-4 Receptor Antibody, IgG by CBA-IFA, CSF with Reflex to Titer	AQPCSF	Specimen Requirement: 1 mL Cerebrospinal fluid (CSF) from a Clean container; Minimum: 0.3 mL; Transport Refrigerated; Transfer 1 mL CSF to standard aliquot tube	effective immediately
Arsenic, Urine 24 Hr	UARSND	Stability: Ambient: 1 week Refrigerated: 2 weeks Frozen: 2 months	effective immediately
Autoimmune Pediatric CNS Disorders, CSF	APCNSC	Specimen Requirement: 4 mL Cerebrospinal fluid (CSF) from a Sterile container; Minimum: 2 mL; Transport Frozen: Transfer 4 mL CSF to a standard aliquot tube and freeze.	effective immediately
Beta-2-Microglobulin, Urine	URB2M	Special Information: Patient preparation: Void the urinary bladder, then drink a large glass of water and collect a urine specimen within 1 hour. Laboratory instructions: If pH is >8, lower pH to 6-8 with 1 M HCL. If pH <6, increate to 6-8 with 5% NaOH. Record the pH on the transport tube and ship to referral laboratory frozen. Grossly hemolyzed specimens and specimens with a urine pH less than 2 or greater than 10 will be rejected.	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
C. difficile PCR with Reflex to EIA if Positive	CDREFL	<p>Special Information: Due to the high sensitivity and negative predictive value of the PCR assay, only one sample per week is accepted for testing. Formed stools, samples from patients <2 yrs old, and specimen received in preservative, visibly contaminated with urine, frozen, on swabs or wooden applicator sticks, will be rejected.</p> <p>Clinical Information: Unformed stools are tested for the presence of C. difficile toxin B gene by PCR. A positive PCR result for C. difficile may represent infection or colonization. The positive predictive value of the PCR assay for C. difficile infection (CDI) is highest for patients with significant diarrhea (3 or more unformed stools in 24 h) who do not have an alternative explanation (e.g., recent receipt of laxatives). Once a patient is diagnosed with CDI, therapeutic response should be based on clinical signs and symptoms; a “test of cure” should not be done since patients may remain colonized with toxin-producing strains following recovery.</p> <p>Specimen Requirement: 5 mL Stool from a Sterile container; Transport Refrigerated; Stool specimens positive for C. difficile toxin by PCR are followed by toxin enzyme immunoassay (EIA) testing within 8 h. A negative toxin EIA result is reported with the following comment “Toxin EIA is less sensitive than cell cytotoxin and PCR assays. Clinical correlation of PCR positive/toxin EIA negative results is required to distinguish C. difficile colonization from disease.” The multistep algorithm was implemented in response to 2017 IDSA guidelines recommending PCR testing as a stand-alone test for C. difficile infection (CDI) only if clinicians agree at the institutional level to NOT submit stool specimens on patients receiving laxatives and to submit stool specimens only from patients with unexplained and new onset of 3 or more unformed stools in 24 h for testing for CDI. Observational studies have reported higher CDI-related complications among patients with EIA toxin positive specimens in comparison to patients with EIA toxin negative/PCR positive results.</p>	4/23/26
Clostridium difficile Toxin by PCR	CDPCR	<p>Special Information: Due to the high sensitivity and negative predictive value of the PCR assay, only one sample per week is accepted for testing. Formed stools, samples from patients <2 yrs old, and specimen received in preservative, visibly contaminated with urine, frozen, on swabs or wooden applicator sticks, will be rejected.</p>	4/23/26
Copper and Zinc, Serum or Plasma	CUZN	<p>Name: Previously Copper/Zinc</p> <p>Specimen Requirement: 1 mL Plasma from an EDTA (Royal blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Separate from cells ASAP or within 2 hours of collection. Transfer plasma to a metal-free polypropylene transport tube. Carefully pour the plasma and avoid transfer of cellular blood components. *OR* 1 mL Serum from an No additive (Royal Blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Allow sample to clot and then separate from cells ASAP or within 2 hours of collection. Transfer serum to a metal-free polypropylene transport tube. Carefully pour the serum and avoid transfer of cellular blood components.</p> <p>Reference Range: Zinc: 60-120 ug/dL Copper: Female: 0–5 Months: 20-70 ug/dL Female: 6 Months–17 Years: 90-190 ug/dL Female: 18–999 Years: 80-155 ug/dL Male: 0–5 Months: 20-70 ug/dL Male: 6 Months–17 Years: 90-190 ug/dL Male: 18–999 Years: 70-140 ug/dL</p>	5/5/26

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Copper, Serum or Plasma	COPPER	<p>Name: Previously Copper</p> <p>Specimen Requirement: 1 mL Plasma from an EDTA (Royal blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Separate from cells ASAP or within 2 hours of collection. Transfer plasma to a metal-free polypropylene transport tube. Carefully pour the plasma and avoid transfer of cellular blood components. *OR* 1 mL Serum from an No additive (Royal Blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Allow sample to clot and then separate from cells ASAP or within 2 hours of collection. Transfer serum to a metal-free polypropylene transport tube. Carefully pour the serum and avoid transfer of cellular blood components.</p> <p>Reference Range: Copper: Female: 0–5 Months: 20-70 ug/dL Female: 6 Months–17 Years: 90-190 ug/dL Female: 18–999 Years: 80-155 ug/dL Male: 0–5 Months: 20-70 ug/dL Male: 6 Months–17 Years: 90-190 ug/dL Male: 18–999 Years: 70-140 ug/dL</p>	5/5/26
Enteric Viral Panel by PCR	EVPPCR	<p>Reference Range: Norovirus GI/GII RNA: Not detected Adenovirus F 40/41 DNA: Not detected Astrovirus RNA: Not detected Rotavirus A RNA: Not detected Sapovirus (Genogroups I, II, IV, V) RNA: Not detected</p>	6/16/26
Ethyl Glucuronide, Urine reflex to Confirm/Quant	UEGLUC	<p>Specimen Requirement: 4 mL Urine, random from a Urine (No Perservative); Minimum: 1.5 mL; Transport Refrigerated</p>	4/28/26
Fentanyl and Metabolite, Serum or Plasma	FENYL	<p>Name: Previously Fentanyl and Metabolite</p> <p>Reference Range: Fentanyl: Cutoff: 0.1 ng/mL Norfentanyl: Cutoff: 0.4 ng/mL</p>	effective immediately
Fluvoxamine, Serum and Plasma	FLUVOX	<p>Special Information: Polymer gel separation tubes (SST or PST) are unacceptable. This test is New York DOH approved.</p> <p>Stability: Ambient: 1 week Refrigerated: 1 month Frozen: 1 year</p> <p>CPT: 80332</p>	4/28/26
Glomerular Basement Membrane IgG Ab, IFA	GBMG	<p>Stability: Ambient: After separation from cells: 2 days Refrigerated: After separation from cells: 2 weeks Frozen: After separation from cells: 30 days</p>	effective immediately
HCG, Qualitative, Urine	UHCG	<p>Clinical Information: Detection of pregnancy.</p>	effective immediately
Hepatitis Delta Virus Antibody by ELISA With Reflex to Hepatitis Delta Virus by Quantitative PCR	AHD	<p>Name: Previously Hepatitis Delta Antibody</p> <p>Special Information: Unacceptable conditions include specimens containing particulate material or obvious microbial contamination and hemolyzed or lipemic specimens. If Hepatitis Delta Virus by Quantitative PCR is performed, additional charges will apply. This test is New York DOH approved.</p> <p>Specimen Requirement: 2 mL serum from a SST (Gold); Minimum: 1 mL; Transport Frozen; Separate serum from cells ASAP or within 2 hours of collection and transfer to standard aliquot tube</p> <p>Stability: Ambient: After separation from cells: 24 hours Refrigerated: After separation from cells: 5 days Frozen: After separation from cells: 30 days (Avoid repeated freeze/thaw cycles)</p> <p>Methodology: Enzyme Immunoassay (EIA) Polymerase Chain Reaction (PCR), Quant</p> <p>Reference Range: Hepatitis Delta Antibody by ELISA: Negative</p>	effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Legionella Species Detection and Limited Differentiation by Multiplex Real-Time PCR	LEGPCR	<p>Stability: Ambient: 24 hours Refrigerated: 7 days</p> <p><i>Note:</i> Frozen stability removed</p>	effective immediately
Ma2/Ta Antibody, IgG CSF	MA2CSF	<p>Specimen Requirement: 2 mL Cerebrospinal fluid (CSF) from a Clean container; Minimum: 1 mL; Transport Refrigerated</p>	effective immediately
N-methyl-D-Aspartate Receptor (NMDAR) Antibody, IgG, CSF, Reflex to Titer	NMDCSF	<p>Specimen Requirement: 1 mL Cerebrospinal fluid (CSF) from a Sterile container; Minimum: 0.3 mL; Transport Refrigerated</p>	effective immediately
Organism Identification, AFB	OIDAFB	<p>Special Information: Indicate on test order: Original date of collection, specimen site, any pertinent preliminary identification information and telephone number including extension where report may be called if necessary. Contraindications: Lack of viability, culture mixed or contaminated. Antimicrobial susceptibilities are performed upon request. A separate order must be placed for this utilizing the test code, AFB Susceptibility (AFBSUS).</p> <p>Clinical Information: Identification of Mycobacterial species</p> <p>CPT: 87116x1; 87118x1; 87153x1; 87150x1</p>	effective immediately
Paraneoplastic Autoantibody Evaluation, Serum	PARNEO	<p>Included tests: Interpretive Comments Amphiphysin Ab Anti-Glial Nuclear Ab, Type 1 Anti-Neuronal Nuclear Ab, Type 1 Anti-Neuronal Nuclear Ab, Type 2 Anti-Neuronal Nuclear Ab, Type 3 CRMP-5-IgG Purkinje Cell Cytoplasmic Ab Type 1 Purkinje Cell Cytoplasmic Ab Type 2 Purkinje Cell Cytoplasmic Ab Type Tr</p> <p><i>Note:</i> Removed Neuronal (V-G) K+ Channel Ab and Calcium Channel Bind Ab, P/Q Type and N-Type</p> <p>Special Information: Reflex Algorithm: If IFA patterns suggest AGNA-1 Ab, AGNA-1 immunoblot is performed at an additional cost. If IFA patterns suggest amphiphysin Ab, amphiphysin immunoblot is performed at an additional cost. If IFA patterns suggest ANNA-1 Ab, ANNA-1 immunoblot is performed at an additional cost. If IFA patterns suggest ANNA-2 Ab, ANNA-2 immunoblot is performed at an additional cost. If IFA patterns suggest PCA-1 Ab, PCA-1 immunoblot is performed at an additional cost. If IFA patterns suggest PCA-Tr Ab, PCA-Tr immunoblot is performed at an additional cost. If IFA patterns suggest CRMP-5-IgG, CRMP-5-IgG Western blot is performed at an additional cost. If IFA patterns suggest GAD65 Ab, GAD65 Ab RIA is performed at an additional cost. If IFA patterns suggest NMDA-R, NMDA-R Ab CBA and/or NMDA-R Ab IF Titer Assay is performed at an additional cost. If IFA patterns suggest AMPA-R, AMPA-R Ab CBA and/or AMPA-R Ab IF Titer Assay is performed at an additional cost. If IFA patterns suggest GABA-B-R, GABA-B-R Ab CBA and/or GABA-B-R Ab IF Titer Assay is performed at an additional cost. If IFA patterns suggest DPPX, DPPX Ab CBA and DPPX Ab titer are performed at an additional cost. If IFA patterns suggest mGluR1, mGluR1 Ab CBA and mGluR1 Ab titer are performed at an additional cost. If CRMP IFA is positive, ACh receptor binding Ab, CRMP-5-IgG Western blot will be performed at an additional cost. Testing should be requested in cases of subacute basal ganglionic disorders (chorea, Parkinsonism), cranial neuropathies (especially loss of vision, taste, or smell) and myelopathies. Neuron-restricted patterns of IgG staining that do not fulfill criteria for amphiphysin, ANNA-1, ANNA-2, ANNA-3, AGNA-1, PCA-1, PCA-2, PCA-Tr, or CRMP-5-IgG may be reported as "unclassified antineuronal IgG." Complex patterns that include non-neuronal elements may be reported as "uninterpretable." Provide relevant clinical information and name, phone number, address, and email of ordering provider.</p> <p><i>(continued on page 6)</i></p>	6/18/26

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Paraneoplastic Autoantibody Evaluation, Serum <i>continued from page 5</i>	PARNEO	<p>Special Information (Continued): Patient Prep: For optimal antibody detection, it is recommended to collect the specimen prior to initiation of immunosuppressant medication. This test should not be requested in patients who have recently received radioisotopes, therapeutically or diagnostically, because of potential assay interference. The specific waiting period before specimen collection will be dependent upon the isotope administered, the dose given, and the clearance rate in the individual patient. Specimens will be screened for radioactivity prior to analysis. Radioactive specimens received in the laboratory will be held for 1 week and assayed if sufficiently decayed, or canceled if radioactivity remains. Patient should have no general anesthetic or muscle-relaxant drugs in the previous 24 hours. Causes for specimen rejection: Grossly hemolyzed, grossly lipemic, grossly icteric.</p> <p>Clinical Information: Note: Titers lower than 1:240 are detectable by recombinant CRMP-5 Western blot analysis. CRMP-5 WB will be done on request on stored serum (held 4 weeks). This supplemental testing is recommended in cases of chorea, vision loss, cranial neuropathy, and myelopathy. Call Cleveland Clinic Client Services at 216-444-5755 and ask them to call the Mayo Neuroimmunology Lab at 800-533-1710 to request CRMP-5 Western blot. This test should not be requested on patients who have recently received radioisotopes, therapeutically or diagnostically, because of potential assay interference. The specific waiting period before specimen collection will depend on the isotope administered, the dose given and the clearance rate in the individual patient. Specimens will be screened for radioactivity prior to analysis.</p> <p>Clinical Information (Continued): Radioactive specimens received in the laboratory will be held one week and assayed if sufficiently decayed, or canceled if radioactivity remains.</p> <p>Reference Range: Antineuronal Nuclear Ab-Type 1 (ANNA-1): Negative AChR Ganglionic Neuronal Ab: < or = 0.02 nmol/L AChR Ganglionic Neuronal Ab: 0-99 Years: < = 0.02 nmol/L Antineuronal Nuclear Ab-Type 2 (ANNA-2): Negative Amphiphysin Ab: Negative Amphiphysin Ab: Negative Antineuronal Nuclear Ab-Typ 3 (ANNA-3): Negative Anti-Gliad Nuclear Ab, Type 1: Negative Purkinje Cell Cytoplasmic Ab-Type 1 (PCA-1): Negative Purkinje Cell Cytoplasmic Ab-Type 2 (PCA-2): Negative Purkinje Cell Cytoplasmic Ab-Type Tr (PCA-Tr): Negative CRMP-5-IgG: Negative</p> <p><i>Note:</i> Removed Calcium Channel Binding Antibody, P/Q-Type and Neuronal Voltage-Gated Potassium Channel (VGKC) Ab</p> <p>CPT: 86255x9</p> <p>Reflexed Test(s): CRMP-5 Western Blot (Reflex only) AGNA-1 Immunoblot, Serum (Reflex only) ANNA-1 Immunoblot, Serum (Reflex only) ANNA-2 Immunoblot, Serum (Reflex only) Amphiphysin Immunoblot, Serum (Reflex only) PCA-1 Immunoblot, Serum (Reflex only) PCA-Tr Immunoblot, Serum (Reflex only)</p> <p><i>Note:</i> Removed: Contactin-Associated Protein-Like-2 (CASPR2)-IgG, Serum (Reflex Only) and Leucine-Rich Glioma Inactivated Protein-1 (LGI1) IgG, Serum (Reflex Only)</p>	6/18/26
Phosphatidylethanol (PEth)	PETH	<p>Special Information: Transport whole blood in the original collection tube. Gel separator tubes will be rejected. This test is New York DOH approved.</p> <p>Specimen Requirement: 2 mL Whole blood in a EDTA (Lavender); Minimum: 1 mL; Transport Refrigerated *OR* 2 mL Whole blood in a Lithium heparin (Green); Minimum: 1 mL; Transport Refrigerated *OR* 2 mL Whole blood in a Potassium oxalate/sodium fluoride (Gray); Minimum: 1 mL; Transport Refrigerated</p>	effective immediately
Thyroglobulin, Serum with Reflex to IA or LC-MS/MS	THYRORF	<p>Specimen Requirement: 2.5 mL Serum in a SST (Gold); Minimum: 1.2 mL; Centrifuge and refrigerate. *OR* 2.5 mL Serum from a No additive (Red); Minimum: 1.2 mL; Centrifuge, aliquot and refrigerate.</p>	5/12/26

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Zinc, Serum or Plasma	ZINC	<p>Name: Previously Zinc</p> <p>Specimen Requirement: 1 mL Plasma from an EDTA (Royal blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Separate from cells ASAP or within 2 hours of collection. Transfer plasma to a metal-free polypropylene transport tube. Carefully pour the plasma and avoid transfer of cellular blood components. *OR* 1 mL Serum from a No additive (Royal Blue); Minimum: 0.5 mL; Transport Refrigerated; Collect in a trace metal-free tube (royal blue top). Allow sample to clot and then separate from cells ASAP or within 2 hours of collection. Transfer serum to a metal-free polypropylene transport tube. Carefully pour the serum and avoid transfer of cellular blood components.</p>	5/5/26

Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
Hepatitis Delta Virus by Quantitative PCR	HDVPCR	Test will no longer be orderable.	effective immediately
Lipoprotein Fractionation by NMR with Lipids	NMRLPD	Test will no longer be orderable. Recommended replacement test is Lipoprotein Fractionation by NMR, Particle Count only (SQNMRPRT) and Lipid Panel, Fasting (SQLIPB).	6/16/26