

# Cleveland Clinic Laboratories

## Technical Update • March 2019

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	Name Change Order Code	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Days Performed/Reported Reference Range	Stability	CPT	Fee
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Summary of Changes  
by Test Name

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# Test Changes

Test Name	Order Code	Change	Effective Date
Acyclovir	ACYCLO	<p><b>For Interfaced Clients Only: Test build may need to be modified</b></p> <p><b>Special Information: Separator tubes are unacceptable. This test is New York DOH approved.</b></p> <p><b>Note: Clinical Information will be removed.</b></p> <p><b>Specimen Requirement:</b> 1 mL serum from a plain no additive (red) tube; Minimum: <b>0.21 mL</b>; Do not use serum separator tubes; <b>Separate serum from cells within 2 hours of collection and transfer into standard aliquot tube</b>; Refrigerated</p> <p>*OR* 1 mL plasma from an EDTA (lavender) tube; Minimum: <b>0.21 mL</b>; <b>Do not use plasma separator tubes</b>; <b>Separate plasma from cells within 2 hours of collection and transfer into standard aliquot tube</b>; Refrigerated</p> <p>*OR* 1 mL plasma from a <b>potassium oxalate/sodium fluoride (gray) tube</b>; Minimum: <b>0.21 mL</b>; <b>Do not use plasma separator tubes</b>; <b>Separate plasma from cells within 2 hours of collection and transfer into standard aliquot tube</b>; Refrigerated</p> <p><b>Reference Range: Refer to report</b></p> <p><b>Days Performed: Varies</b></p> <p><b>Reported: 8–11 days</b></p>	2/28/19
Aeromonas/ Plesiomonas Culture	AERPLE	<p><b>Special Information: Transfer stool into Cary-Blair transport media immediately after collection and prior to transport. Alternatively, stool may be transported in a sterile container if received within 2 hours of collection.</b> If culture is positive, identification will be performed at an additional charge. Identification CPT codes that may apply include: 87077, 87153. Antimicrobial susceptibilities are performed when indicated, and the following CPT codes may apply: 87181, 87184, 87186</p> <p><b>Clinical Information: Routine stool culture has been replaced with a molecular assay (Enteric Bacterial Panel by PCR, STLPCR) detecting Salmonella, Shigella, Campylobacter jejuni/coli, &amp; Shiga-toxin producing genes (submit stool in Cary-Blair or sterile container). Vibrio is screened for with a separate culture order (Vibrio Culture, VIBCUL). Yersinia is screened for with a separate culture order (Yersinia Culture, YERCUL). Requests for testing on patients who have been in the hospital &gt; 3 days will be rejected since there is a low likelihood of the enteric pathogens screened for in this test causing diarrhea in this population.</b></p> <p><b>Specimen Requirement:</b> 5 mL stool; <b>To optimize recovery, transfer stool into Cary-Blair transport media immediately after collection and prior to transport; Alternatively, stool may be transported in a sterile container if received within 2 hours of collection; Refrigerated</b></p> <p><b>Stability:</b>            Ambient: <b>2 hours</b>            Refrigerated: <b>Preserved</b> (Cary-Blair Transport Media): 72 hours; <b>Unpreserved: 2 hours</b>            Frozen: Unacceptable</p>	4/17/19
BAL FCM Markers Package	BALFCM	<b>Note: Please refer to changes for BAL, Routine (BALAVI).</b>	5/14/19
BAL, Routine	BALAVI	<b>Note: The following reporting comment will be added: "A normal reference range has not been established for this body fluid."</b>	5/14/19
Carbamazepine-10,11-Epoide	CARBEP	<p><b>Days Performed: Monday–Friday</b></p> <p><b>Reported: 1–8 days</b></p>	5/7/19
Cell Count/Diff, Body Fluid	CCBF	<p><b>Reference Range:</b>            Body fluid RBC: &lt; <b>2000 cells/μL</b>            Total Nucleated Cells: &lt; <b>1000 cells/μL</b>  <i>Please note ranges for these differential components:</i>            Macrophages: <b>64–80%</b>            Lymphocytes: <b>18–36%</b>            Neutrophils: <b>0–1%</b>            Mesothelials: <b>0–2%</b></p>	4/30/19
Chromosome Analysis, Bone Marrow	CHRBMH	<p><b>Days Performed: Sunday–Saturday</b></p> <p><b>Reported: 8–12 days</b></p>	5/9/19

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Chromosome Analysis, Leukemic Blood	CHRBLL	<b>Days Performed:</b> Sunday–Saturday <b>Reported:</b> 8–12 days	5/9/19
Complement Component Level 4A	COMP4A	<b>Note:</b> <i>The following alias names have been added: C4a, C4AL and Complement C4a</i>	Effective immediately
CSF, Cell Count and Diff	CCCSF	<b>Reference Range:</b> RBC, CSF: 0–5 cells/ $\mu$ L Total Nucleated Cells, CSF: 0–5 cells/ $\mu$ L	5/7/19
CSF, Routine Analysis	RTCSF	<b>Note:</b> <i>Please refer to changes for CSF, Cell Count and Diff (CCCSF).</i>	5/7/19
Eosinophil Smear	EOSSMR	<b>Note:</b> <i>The alias name Fecal Smear for Eosinophils will be removed.</i> <b>Specimen Requirement:</b> Nasal smear; Ambient *OR* Random urine in a clean container; Refrigerated *OR* Sputum smear; Ambient	4/30/19
Felbamate	FELBA	<b>Days Performed:</b> Monday–Friday <b>Reported:</b> 1–8 days	5/7/19
FISH for Chronic Lymphocytic Leukemia	CLLFISH	<b>Specimen Requirement:</b> 5–7 mL whole blood in an EDTA (lavender) tube; Minimum: 4 mL; <b>If aliquoting is necessary, sterile aliquot tubes must be used; Ambient</b> *OR* 5–7 mL whole blood in a sodium heparin (green) tube; Minimum: 4 mL; <b>If aliquoting is necessary, sterile aliquot tubes must be used; Ambient</b> <b>Stability:</b> Ambient: 48 hours Refrigerated: 48 hours Frozen: <b>Unacceptable</b> <b>Days Performed:</b> Monday–Thursday <b>Reported:</b> 5 days	4/30/19
Histoplasma Antibodies, CSF	HISTCS	<b>Stability:</b> Ambient: 7 days Refrigerated: 14 days Frozen: 30 days	3/25/19
Itraconazole	ITRAC	<b>For Interfaced Clients Only: Test build may need to be modified</b> <b>Includes:</b> Itraconazole Hydroxyitraconazole (Note: <i>Total Itraconazole will be removed</i> ) <b>Clinical Information:</b> Ranges are based on trough draw at steady-state concentration. <b>Test performed by LC-MS/MS.</b> Ranges are based off the <b>Itraconazole trough levels alone, not combined with hydroxyitraconazole:</b> Therapeutic: > 1.0 $\mu$ g/mL; Prophylaxis: > 0.4 $\mu$ g/mL; Toxic: > 3.0 $\mu$ g/mL (Toxic values will not be called.) <b>The therapeutic, prophylactic, and toxic ranges were based on the 2016 Infectious Disease Society (IDSA) Clinical Practice Guidelines for the Management of Aspergillosis and consultation from Cleveland Clinic's Department of Infectious Disease. Reference ranges and high/low indicator flags are provided as general guidelines only. The treating physician must determine appropriate target levels/dosing based on the specific clinical situation.</b> <b>Reference Range:</b> Itraconazole: 0.5–3.0 $\mu$ g/mL Hydroxyitraconazole: <b>No reference range is provided</b>	4/30/19
Lactate Dehydrogenase, Body Fluid	BFLDH	<b>Stability:</b> Ambient: 7 days Refrigerated: 2 days Frozen: <b>Unacceptable</b>	Effective immediately

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Lamotrigine	LMTR	<b>Days Performed: Monday–Friday</b> <b>Reported: 1–5 days</b>	5/7/19
Neisseria meningitidis IgG Vaccine Response	NMEN	<b>Special Information: Plasma is unacceptable.</b>	3/25/19
Phenobarbital, Free	PHENFR	<b>Special Information: Gel-barrier tubes are not recommended.</b> <b>Note: Clinical Information has been removed.</b> <b>Methodology:</b> Immunoassay (IA) <b>Ultrafiltration (ULT)</b> <b>Days Performed: Sunday–Saturday</b> <b>Reported: 2–4 days</b>	Effective immediately
Routine Body Fluid Analysis	ROUBFL	<b>Note: Please refer to changes for Cell Count/Diff, Body Fluid (CCBF).</b>	4/30/19
Sulfatide Autoantibody	SULTID	<b>Special Information: Serum must be separated from whole blood within 48 hours of collection.</b> <b>Stability:</b> Ambient: <b>72 hours</b> Refrigerated: <b>21 days</b> Frozen: <b>1 year</b> <b>Days Performed: Varies</b> <b>Reported: 8–11 days</b>	3/25/19
Synovial Fluid, Routine Analysis	RTSYNF	<b>Reference Range:</b> Synovial Fluid, Routine Analysis: Refer to report Synovial fluid RBC: < <b>2000 cells/μL</b> Total Nucleated Cells: <b>0–200 cells/μL</b>	5/7/19
Vibrio Culture	VIBCUL	<b>Special Information: Transfer stool into Cary-Blair transport media immediately after collection and prior to transport. Alternatively, stool may be transported in a sterile container if received within 2 hours of collection.</b> If culture is positive, identification will be performed at an additional charge. Identification CPT codes that may apply include: 87077, 87153. Antimicrobial susceptibilities are performed when indicated, and the following CPT codes may apply: 87181, 87184, 87186 <b>Clinical Information: Routine stool culture has been replaced with a molecular assay (Enteric Bacterial Panel by PCR, STLPCR) detecting Salmonella, Shigella, Campylobacter jejuni/coli, &amp; Shiga-toxin producing genes (submit stool in Cary-Blair or sterile container). Aeromonas and Plesiomonas are screened for with a separate culture order (Aeromonas/Plesiomonas Culture, AERPLE). Yersinia is screened for with a separate culture order (Yersinia Culture, YERCUL). Requests for testing on patients who have been in the hospital &gt; 3 days will be rejected since there is a low likelihood of the enteric pathogens screened for in this test causing diarrhea in this population.</b> <b>Specimen Requirement: 5 mL stool specimen; To optimize recovery, transfer stool into Cary-Blair transport media immediately after collection and prior to transport; Alternatively, stool may be transported in a sterile container if received within 2 hours of collection; Refrigerated</b> <b>*OR*</b> Rectal swab; Rectal swabs should be shipped refrigerated at 2–8 °C and are stable for up to 3 days; Refrigerated <b>Stability:</b> Ambient: <b>2 hours</b> Refrigerated: <b>Preserved</b> (Cary-Blair Transport Media): 72 hours; <b>Unpreserved: 2 hours</b> Frozen: Unacceptable	4/17/19

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Yersinia Culture	YERCUL	<p><b>Special Information:</b> Transfer stool into Cary-Blair transport media immediately after collection and prior to transport. Alternatively, stool may be transported in a sterile container if received within 2 hours of collection. If culture is positive, identification will be performed at an additional charge. Identification CPT codes that may apply include: 87077, 87153. Antimicrobial susceptibilities are performed when indicated, and the following CPT codes may apply: 87181, 87184, 87186</p> <p><b>Clinical Information:</b> Routine stool culture has been replaced with a molecular assay (Enteric Bacterial Panel by PCR, STLPCR) detecting Salmonella, Shigella, Campylobacter jejuni/coli, &amp; Shiga-toxin producing genes (submit stool in Cary-Blair or sterile container). Aeromonas and Plesiomonas are screened for with a separate culture order (Aeromonas/Plesiomonas Culture, AERPLE). Vibrio is screened for with a separate culture order (Vibrio Culture, VIBCUL). Requests for testing on patients who have been in the hospital &gt; 3 days will be rejected since there is a low likelihood of the enteric pathogens screened for in this test causing diarrhea in this population.</p> <p><b>Specimen Requirement:</b> 5 mL stool; <b>To optimize recovery,</b> transfer stool into Cary-Blair transport media immediately after collection and prior to transport; <b>Alternatively,</b> stool may be transported in a sterile container if received within 2 hours of collection; Refrigerated</p> <p><b>Stability:</b>            Ambient: <b>2 hours</b>            Refrigerated: <b>Preserved</b> (Cary-Blair Transport Media): 72 hours; <b>Unpreserved: 2 hours</b>            Frozen: Unacceptable</p>	4/17/19

# New Tests

Test Name	Order Code	Change	Effective Date
IgG CSF Index	TOURT	<p><b>Clinical Information:</b> Determination of central nervous system (CNS) immunoglobulin synthesis in the evaluation of CNS autoimmune disease, especially multiple sclerosis. Intracerebral bleed, traumatic spinal tap, and other causes of cerebrospinal fluid (CSF) contamination with serum will cause elevated results.</p> <p><b>Specimen Requirement:</b> 1 mL cerebrospinal fluid (CSF) in a clean container; Minimum: 0.2 mL; Refrigerated</p> <p>*AND* 1 mL serum from a serum separator (gold) tube; Minimum: 0.2 mL; Collect cerebrospinal fluid (CSF) and blood within same 24-hour period; Refrigerated</p> <p><b>Stability:</b>            Ambient: 8 hours            Refrigerated: 8 days            Frozen: 1 year if frozen within 24 hours of collection</p> <p><b>Methodology:</b> Nephelometry (NEPH)</p> <p><b>Reference Range:</b>            CSF IgG: 0.6–4.2 mg/dL            CSF Albumin (0–99 Years): 9.3–31.3 mg/dL            Serum IgG: 717–1411 mg/dL            Serum Albumin: 3276–4819 mg/dL            CSF IgG/Albumin Ratio: 0.06–0.17            CNS IgG Synthesis: 0–3.0 mg/d            CSF IgG Index: 0–0.61</p> <p><b>Days Performed:</b> Monday–Saturday</p> <p><b>Reported:</b> 1–2 days</p> <p><b>CPT:</b> 82040 x 1, 82042 x 1, 82784 x 2</p>	4/30/19
Phosphatidylethanol (PEth)	PETH	<p><b>Clinical Information:</b> Biomarker associated with ethanol consumption; may be helpful in monitoring alcohol abstinence.</p> <p><b>Specimen Requirement:</b> 1 mL whole blood in an EDTA (lavender) tube; Minimum: 0.5 mL; Refrigerated</p> <p><b>Stability:</b>            Ambient: Unacceptable            Refrigerated: 2 weeks            Frozen: 6 months</p> <p><b>Methodology:</b> Quantitative Liquid Chromatography–Tandem Mass Spectrometry</p> <p><b>Reference Range:</b> Refer to report</p> <p><b>Days Performed:</b> Varies</p> <p><b>Reported:</b> 6–13 days</p> <p><b>CPT:</b> 80321 x 1 (G0480, if appropriate)</p>	3/5/19

## Fee Increases

Test Name	Order Code	List Fee	CPT Code	Effective Date
Adenovirus Antigen Detection, Gastroenteritis, EIA	SADNO	\$132.00 (non-discountable)	87301	Effective immediately
Cystatin C with Estimated GFR, Serum	CYCGFR	\$225.00 (non-discountable)	82610	3/5/19
Cystinuria Profile, Quantitative 24 Hour Urine	UCYS24	\$358.00 (non-discountable)	82136	3/5/19
Digoxin, Free	DIGFR	\$215.00 (non-discountable)	80163	3/5/19
EGFR Mutation Analysis, Tissue	EGFRTI	\$1081.00 (non-discountable)	81235, 88381	Effective immediately
Her-2-Neu Serum	HER2S	\$256.00 (non-discountable)	83950	3/5/19
Hydrocodone and Metabolites	HYDSER	\$110.00 (non-discountable)	80361, (G0480, if appropriate)	3/5/19
IDH1 & IDH2 Gene Analysis	IDH12GN	\$963.00	81120, 81121, 88381	Effective immediately

## Fee Reductions

Test Name	Order Code	List Fee	CPT Code	Effective Date
Alpha-1-Antitrypsin Clearance, Timed	A1ACL	\$62.00 (non-discountable)	82103 x 2	3/7/19
Alpha-1 Antitrypsin Genotyping	HA1AT	\$275.00	81332	Effective immediately
Benzotropine	BENZTR	\$101.00 (non-discountable)	80375, (G0480, if appropriate)	3/5/19
FISH for 22q11.2 Del, VCF, DiGeorge	DGEORG	\$294.00 (non-discountable)	88271 x 2, 88275	Effective immediately
FISH for Chronic Lymphocytic Leukemia	CLLFSH	\$1588.00 (non-discountable)	88271 x 7, 88275 x 3, 88291	4/30/19
FISH Neuroblastoma 2p24 MYCN Amp	MYCNFB	\$460.00 (non-discountable)	88271 x 2, 88275	Effective immediately
Hyperoxaluria, Urine	UHYPER	\$168.00 (non-discountable)	82542	Effective immediately
MSI (PCR) X 2	MSICCT	\$866.00 (non-discountable)	81301, 88381	Effective immediately
Mucopolysaccharides (MPS) Screen, Urine	UMPSSC	\$153.00 (non-discountable)	82542, 83864	Effective immediately
Pipecolic Acid, Urine	UPIPE	\$184.00 (non-discountable)	82542	Effective immediately
Purine and Pyrimidine Panel	UPURPY	\$133.00	82542	Effective immediately
Williams Syndrome, 7q11.23 Deletion, FISH	WMS	\$246.00 (non-discountable)	88271 x 2, 88273	Effective immediately



## Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
IgG CSF Index – RL	TOURTR	This test will no longer be available. Suggest ordering IgG CSF Index (TOURT).	4/30/19
Myelin Associated Glycoprotein Antibody IgM Western Blot with Reflex	MAGANT	This test will no longer be available. Suggest ordering Myelin Associated Glycoprotein (MAG) Ab, IgM (MAGIGM).	5/2/19
Neosensory Neuropathy Paraneoplastic Profile	NEOSEN	This test will no longer be available. Suggest ordering Paraneoplastic Autoantibody Evaluation, Serum (PARNEO) or Paraneoplastic Autoantibody Evaluation, CSF (PARCSF).	5/2/19