



Technical Update • January 2014

Cleveland Clinic Laboratories is dedicated to keeping you updated and informed about recent testing changes. That's why we are happy to provide this technical update on a monthly basis.

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

If you wish to compare the new information with previous test demographics, refer to the Test Directory, which can be accessed at clevelandcliniclabs.com.

Deleted tests and new tests are listed separately. 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.

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	Test Discontinued New Test	Specimen Requirement Special Information	Component Requirement	Days Performed/Reported Reference Range	Methodology	CPT	Fee
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3	ACTA2 Gene Sequencing										
3	Adenovirus PCR										
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6	Allergen Lemon IgE										
6	Allergen Lime IgE										
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4	Clozapine										

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4, 8	Cryptococcus Antibody										
4	DM2 DNA Test										
8	Erythropoietin										
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4	Familial Mediterranean Fever, Complete										
4, 8	Fungitell Assay for (1,3)-B-D-Glucan										
4	Gabapentin										
4	Gabapril										
4	Galactocerebrosidase										
4	GCH1 Gene Analysis										
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4, 8	Glomerular Basement Membrane Antibody										
4	Glucose Transporter Deficiency SLC2A1										
4	Herpesvirus 6 PCR, Quant										
5, 8	Histoplasma Antigen, Urine										
5	Immune Function Assay ATP										
5	Interleukin 28B Associated Variants, 2 SNPs										
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5	Lamotrigine										
5	Lead, Blood										
5	Levetiracetam										
5	Megaloblastic Anemia Panel										
5	MGMT Methylation										
5	Mycophenolic Acid										
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5	SCA1 DNA Test										
5, 8	SCA7 DNA Test										
5	SCA2 Expansion Analysis										
5	SHOX DNA Diagnostic										
8	Somatostatin										
5	Stool Culture/EIA										
7	Stratify JCV Antibody & Index, Reflex to Inhibition Assay										
5	Throat Culture, Routine										
5	Thyroid Stimulating Immunoglobulin										
5	Trichomonas vaginalis by Amplified Detection										
5	Trichomonas vaginalis RNA, Urine Qual. Males										
5	TSH Receptor Antibody										
8	Zinc, Whole Blood										
5	Zonisamide										

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
17-Hydroxycorticosteroids	U17OHC	84256	<p>Specimen Requirements: 12 mL Urine, 24 hr. Add 1 gram Boric Acid (one tablet) to 100mL Urine and mix well. Call Client Services at 800.628.6816 or 216.444.5755 for Boric Acid tablets. Freeze aliquot ASAP. No preservative is necessary if frozen within 15 minutes of collection.</p> <p>Specimen Stability: Ambient (with preservative): 4 hours; Refrigerated (with preservative): 1 week; Frozen: 1 month.</p> <p>Reference Range: 17 OH Corticosteroids (mg/g crt) 2.0 - 6.5 mg/g crt 17 OH Corticosteroids (per volume): 4.0 - 14.0 mg/d Creatinine: Refer to Report</p> <p>Days Performed: Tues, Friday</p> <p>Reported: 4 - 8 days</p> <p>Special Information: Indicate total volume of 24 hour collection. pH should be between 5.0 - 7.0 after the addition of the Boric Acid and before freezing the aliquot.</p> <p>Price \$149.00</p>	1/30/2014
ACTA2 Gene Sequencing	ACTA2	88528	CPT: 81405	1/2/2014
Adenovirus PCR	ADEPCR	81514	<p>Specimen Requirement: 0.9 mL cerebrospinal fluid (CSF) in a sterile container, Refrigerated *OR* 0.9 mL plasma from an ACD A or B yellow top tube, Refrigerated *OR* 0.9 mL plasma from an EDTA lavender top tube, Refrigerated</p>	1/23/2014
BAL FCM Markers	FCBAL	83168	Price: \$195.00 (discountable)	1/29/2014
BAL FCM Markers Package	BALFCM	40	Price: \$294.00	1/29/2014
Barth Syndrome, Carrier	BARCAR	82536	CPT: 81406	1/2/2014
BCL2 mbr (PCR)	BCL2	88420	CPT: 81402	1/2/2014
Bordetella Pertussis DFA	BORDFA	77087	<p>External Specimen Requirement: Unspecified. Bronchial Aspirate, Swab collected in Amies with Charcoal media or Regan-Lowe media. Refrigerated *OR* Unspecified. Transtracheal Aspirate, Swab collected in Amies with Charcoal media or Regan-Lowe media. Refrigerated *OR* Unspecified. Nasopharynx, Swab collected in Amies with Charcoal media or Regan-Lowe media. Refrigerated</p>	12/10/2013
Blau Syndrome NOD2/ CARD15 Complete Gene Analysis	BLAU	88320	CPT: 81401	1/2/2014
BRAF V600E Blood, Bone Marrow	BRAFBM	88453	<p>Vendor Information: University of Michigan Health System. Test Code: BRAF</p>	1/2/2014
Caffeine	CAFF	79238	<p>CPT: 80155 Price: \$126.00 (non-discountable)</p>	1/2/2014
Collagen Type II Antibody	CIAB	88122	Price: \$115.00 (non-discountable)	1/2/2014
Chlamydia Antibody Evaluation	CIGIM	76227	<p>Specimen Requirement: 1 mL serum from a serum separator tube; Remove serum from cells ASAP or within 2 hours of collection; Refrigerated</p> <p>Stability: After separation of cells; Ambient 2 days, Frozen 1 year, Refrigerated 2 weeks.</p> <p>Methodology: Semi-Quantitative Indirect Fluorescent Antibody (IFA)</p> <p>Reference Range: C pneumoniae IgG: < 1:64 C pneumoniae IgM: < 1:20 C psittaci IgG: < 1:64 C psittaci IgM: < 1:20 C trachomatis IgG: < 1:64 C trachomatis IgM: < 1:20</p> <p>Days Performed: Sunday - Friday</p> <p>Reported: 2 - 5 days</p>	1/16/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Clozapine	CLOZ	87714	Special Information: A therapeutic range has not been established; however, a clozapine level of 100 ng/mL is suggested as the minimum therapeutic threshold. Data suggests that concentrations between 100 and 700 ng/mL correlate more with response; however, non-response does occur within this range. For refractory schizophrenia, at least 350 ng/mL of clozapine is suggested to achieve a therapeutic response. After initial therapeutic response occurs, the dose should be progressively reduced to the minimum level necessary to maintain clinical remission. The likelihood of seizures and other side effects increase with clozapine levels greater than 1200 ng/mL and/or dosages greater than 600 mg/d. Critical Range: > 2,000 ng/mL Specimen Requirements: Alternate: 1mL EDTA Lavander (only acceptable alternate requirement). CPT: 80159	1/2/2014
Cryptococcus Antibody	CRYPAB	89349	CPT: 86403 Price: \$342 (discountable)	1/9/2014
DM2 DNA Test	DM2DNA	82402	CPT: 81401	1/2/2014
Everolimus	EVEROL	88194	CPT: 80169	1/2/2014
Familial Mediterranean Fever, Complete	FAMMED	82936	CPT: 81404	1/2/2014
Fungitell Assay for (1,3)-B-D-Glucan	BDGLUC	88499	Price: \$199.00 (non-discountable)	1/2/2014
Gabapentin	GABA	79153	Special Information: Monitor therapeutic administration. The proposed therapeutic range for seizure control is 2 - 20 µg/mL . Concentrations that exceed 25 ug/mL may contribute to adverse effects. Pharmacokinetics varies wildly among patients, particularly those with compromised renal function. CPT: 80171	1/2/2014
Gabapril	GABIT	80319	CPT: 80199	1/2/2014
Galactocerebrosidase	GALSYL	87823	CPT: 81406	1/2/2014
GCH1 Gene Analysis	GCH1	88170	CPT: 81405	1/2/2014
Gene Analysis 21 Hydroxylase	21GENE	88173	Specimen Requirements: 3mL whole blood in an EDTA Lavander top tube. Refrigerated. A signed "Informed Consent for Genetic Testing" form and a completed "CYP21A2 Gene Testing Patient Information" form are required. These forms are available through Client Services at 800.628.6816 or 216.444.5755. Stability: Ambient 7 - 10 days, Refrigerated: 7 - 10 days, Frozen Undetermined Methodology: DNA Sequencing, Polymerase Chain Reaction (PCR), Deletion Detecting by Multiplex Ligation-Dependent Probe Amplification (MLPA). Days Performed: Monday Results: 12 - 13 days CPT: 81405, 81402	1/2/2014
Glomerular Basement Membrane Antibody	GMB	75036	Price: \$205.00 (non-discountable)	1/2/2014
Glucose Transporter Deficiency SLC2A1	SLC2A1	88160	CPT: 81405	1/2/2014
Herpesvirus 6 PCR, Quant	HV6QNT	84312	Clinical Information: Assay Range: Plasma/Serum: 188 copies/mL - 1 x 10(8) copies/mL BAL: 78 - 1 x 10(8) copies/mL Bone Marrow: 183 - 1 x 10(8) copies/mL CSF: 81 - 1 x 10(8) copies/mL Tissue: 8 - 1 x 10(7) copies/mL Tracheal Wash: 78 - 1 x 10(8) copies/mL Whole Blood: 79 - 1 x 10(8) copies/mL Fecal Specimens: Detected/Not Detected	1/30/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Histoplasma Antigen, Urine	UHISTO	79421	Test Name: Previously Histoplasma Antigen Stability: Ambient 7 days, Refrigerated 7 days, Frozen 2 months at -80 °C (stable for 3 freeze/thaw cycles). Reference Range: < 0.6 ng/mL Days Performed: Monday, Thursday Reported: 1 - 5 days Price: \$95.00	2/11/2014
Immune Function Assay ATP	IMMFUN	82662	Specimen Requirement: 3 mL whole blood in a sodium heparin green top tube; Specimen must be collected AFTER 6 am and received at Cleveland Clinic Laboratories on day of collection by 12:00 noon EST Monday - Friday; Critical Ambient temperature	1/16/2014
Interleukin 28B Associated Variants, 2 SNPs	IL28B	88185	CPT: 81400	1/2/2014
Lamotrigine	LMTR	82127	CPT: 80177	1/2/2014
Lead, Blood	LEAD2	83655	Reference Range: 0.0 - 4.9 µg/dL	12/9/2013
Levetiracetam	LEVET	81702	CPT: 80177	1/2/2014
Megaloblastic Anemia Panel	ANEMIA	82935	CPT: 82131, 83090, 83921, 82542	1/2/2014
MGMT Methylation		89198	CPT: 81287	1/2/2014
Mycophenolic Acid	MYCOPH	79905	CPT: 80180	1/2/2014
Ova and Parasite Screen	OVAPSC	79811	CPT: 87328, 87329 Price: \$72.00	3/1/2014
Oxcarbazepine	OXCARB	88170	CPT: 81405	1/2/2014
SCA1 DNA Test	SCA1	89657	CPT: 81401	1/2/2014
SCA7 DNA Test	SCA7	89656	CPT: 81401 Price: \$522.00 (non-discountable)	1/2/2014
SCA2 Expansion Analysis	SCA2	89650	CPT: 81401	1/2/2014
SHOX DNA Diagnostic	SHOX	84044	Specimen Stability: Ambient: 1 week Refrigerated: 2 weeks Frozen: Unacceptable Methodology: Polymerase Chain Reaction (PCR) CPT: 81405	1/2/2014
Stool Culture/EIA	STOCUL	77142	Specimen Requirement: 5 mL stool in Cary-Blair transport media. Immediate placement of stool into media is recommended; Refrigerated	12/18/2013
Throat Culture, Routine	THRCUL	76838	Specimen Requirement: Throat culturette swab (sterile Dacron or rayon-tipped) to sample inflamed areas and exudate from the posterior pharynx . Place swab in transport medium. Routine throat cultures will be processed only for growth of β -hemolytic Streptococcus species. Ambient	1/9/2014
Thyroid Stimulating Immunoglobulin	TSIG	41040	Specimen Requirement: Minimum 0.5 mL Methodology: Bioassay, Enzyme - Linked Immunosorbent Assay (ELISA) Reference Range: <150% of normal response Reported: 1 - 6 days Days Performed: Monday, Thursday	1/22/2014
Trichomonas vaginalis by Amplified Detection	VAGAMD	89383	CPT: 87661	1/2/2014
Trichomonas vaginalis RNA, Urine Qual, Males	UTRICM	89708	CPT: 87661	1/2/2014
TSH Receptor Antibody	TRAB	41202	Specimen Requirement: 2mL serum separator tube (gold), Refrigerated; Minimum 1 mL Methodology: Bioassay, Enzyme - Linked Immunosorbent Assay (ELISA) Reference Range TSIG: <150% of normal response Reported: 1 - 6 days	1/22/2014
Zonisamide	ZONIS	82419	CPT: 80203	1/22/2014

New Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Allergen Broccoli IgE	BROCCI	89801	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014
Allergen Lemon IgE	LEMON	89799	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014
Allergen Lime IgE	LIME	89800	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014
Allergen Mackerel IgE	MACKEL	89806	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014
Allergen Plum IgE	PLUMM	89805	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014
Allergen Red Dye IgE	REDDYE	89802	Specimen Requirement: 0.1 mL serum from a serum separator tube; Refrigerated Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: < 0.35 kU/L Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	1/21/2014

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
Anaerobe Culture	ANACUL	89789	<p>Special Information: submit tissue or aspirates. Swabs are suboptimal and will be rejected. Transport tissue specimens in a BBL Port-A-Cul Jar. Fluid collections should be aspirated through disinfected tissue or skin. Transport fluid specimens in a BBL Port-A-Cul Vial. Cleanse the Port-A-Cul vial stopper with alcohol; allow to dry 1 minute before inoculation. Push needle through septum and inject specimen on top of agar. Anaerobic cultures are routinely held 5 days. Incubation will be extended to 10 days if order includes a request to rule out <i>Actinomyces spp.</i> or <i>propionobacterium acnes</i>. Susceptibility testing is performed on pure culture of isolates of anaerobic isolates of anaerobic bacteria or by request.</p> <p>Specimen Requirement: Body Fluid: Volume/Size = 0.5 mL - 10 mL in an Anaerobe transport vial (BBL Port-A-Cul Vial) Biopsy: Volume/Size = Unspecified (in a Anaerobic Jar (BBL Port-A-Cul Vial preferred). Surgical Tissue: Volume/Size = Unspecified in an Anaerobic Jar (BBL Port-A-Cul Vial)</p> <p>Stability: Ambient: 48 Hours, Refrigerated: Unacceptable, Frozen: Unacceptable.</p> <p>Methodology: Culture</p> <p>Reference Range: Negative for anaerobes</p> <p>Days Performed: Sun - Sat (8 Hours)</p> <p>Reported: 5 - 10 days</p> <p>CPT: 87075</p> <p>Price: \$78.00</p>	2/25/2014
Ketamine & Metabolite, Serum/Plasma	KETMIN	89770	<p>Specimen Requirement: 5 mL serum from a serum separator tube; Refrigerated</p> <p>Methodology: Gas Chromatography Mass Spectrometry (GCMS)</p> <p>Reference Range: Not established</p> <p>Days Performed: Monday, Wednesday, Friday</p> <p>Reported: 2 - 6 days</p> <p>CPT: 80101</p> <p>Price: \$135.00</p>	1/16/2014
Reticulin Antibody, IgG with Reflex to Titer	RETIGG	89775	<p>Special Information: If the Reticulin IgG screen is positive, the antibody titer will be performed at an additional charge.</p> <p>Specimen Requirement: 0.5 mL serum from a serum separator tube; Separate serum from cells ASAP or within 2 hours of collection; Refrigerated</p> <p>Methodology: Indirect Fluorescent Antibody (IFA)</p> <p>Reference Range: Negative</p> <p>Days Performed: Varies</p> <p>Reported: 4 - 8 days</p> <p>CPT: 86255, if reflexed add 86256</p> <p>Price: \$96.00</p>	1/9/2014
Stratify JCV Antibody & Index, Reflex to Inhibition Assay	JCVIDX	89784	<p>Special information: If the Index Value is between 0.19 - 0.41 Index Units (not inclusive), then the JCV Virus Antibody Inhibition Assay will be performed at no additional cost.</p> <p>Index Interpretive Criteria: Negative: < 0.20 Indeterminate: 0.20 - 0.40 Positive: > 0.40</p> <p>Specimen Requirement: 0.5 mL serum from a serum separator tube; Ambient</p> <p>Methodology: Immunoassay (IA)</p> <p>Reference Range: Antibody: Negative Index: Refer to report</p> <p>Days Performed: Monday - Friday</p> <p>Reported: 2 - 15 days</p> <p>CPT: 86711</p> <p>Price: No Charge</p>	2/20/2014

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
Zinc, Whole Blood	ZINCWB	89781	Special Information: Reporting limit: 40 µg/dL Specimen Requirement: 1 mL whole blood in an EDTA navy blue top tube; Transport blood in original tube; Refrigerated Methodology: Inductively Coupled Plasma/Optical Emission Spectrometry (ICP-OES) Reference Range: Refer to report Days Performed: Varies Reported: 4 - 9 days CPT: 84630 Price: \$90.00	1/23/2014

Fee Increases

Test Name	Order Code	Billing Code	List Fee	CPT Code
Blau Syndrome NOD2/CARD15 Complete Gene Analysis	BLAU	88320	\$1,348.00	81401
BRAF V600E Blood, Bone Marrow	BRAFBM	88453	\$345.00 (non-discountable)	81210
Collagen Type II Antibody	CIAB	88122	\$115.00 (non-discountable)	83520
Erythropoietin	EPO	29000	\$92.00	82668
Fungitell Assay for (1,3)-B-D-Glucan	BDGLUC	88499	\$199.00 (non-discountable)	87449
Glomerular Basement Membrane Antibody	GBM	75036	\$205.00 (non-discountable)	84181
Ova and Parasite Screen	OVAPSC	79811	\$72.00	87329, 87328
SCA7 DNA Test	SCA7	89656	\$522.00 (non-discountable)	81401

Fee Reductions

Test Name	Order Code	Billing Code	List Fee	CPT Code
BAL FCM Markers	FCBAL	83168	\$195.00 (discountable)	86356x5
BAL FCM Markers Package	BALFCM	40	\$294.00 (discountable)	86356x5, 89051
Cryptococcus Antibody	CRYPAB	89349	\$342.00 (discountable)	86403
Histoplasma Antigen, Urine	UHISTO	79421	\$95.00	87385
Somatostatin	SOMATO	76232	\$165.00 (non-discountable)	84307

Discontinued Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Anaerobic Culture and Stain	AMCUL	76198	This test will no longer be available. Suggest ordering Anaerobe Culture (ANACUL)	2/25/2014
Anaerobic Tissue Culture and Stain	AMTIS	77915	This test will no longer be available. Suggest ordering Anaerobe Culture (ANACUL)	2/25/2014
Oligosaccharides, Urine	UOLIGS	82926	This test will no longer be available. Suggest ordering Oligosaccharide and Glycan Screening (OLIGLY)	1/1/2014