Cleveland Clinic

Cleveland Clinic Laboratories

Technical Update • May 2013

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	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change	Methodology	Reference Range	Days Performed/Reported	CPT	Fee
2	ACTA2 Gene Sequencing												■	
5	Allergen, Cabbage IgE				■									
5	Allergen, Grapefruit IgE				■									
5	Allergen, Pear IgE				■									
6	Allergen, Whole Egg IgE				■									
2	Antimony, Urine									■				
2	Beta Galactosidase, Leukocytes										■	■		
2	Bioavailable Testosterone & SHBG, Female and Children								■					
3	Cadmium, Urine									■				
3	Chromium, Urine								■	■				
8	CMT Evaluation, Complete					■								
8	CMT Evaluation, Partial					■								
3	Cocaine & Benzoylecgonine, Quant								■	■	■		■	
3	COL3A1 Gene Sequencing, Blood												■	
3	Cryptococcus Antigen Detection								■					
3	DRPLA DNA Test								■					
3	Drug Analysis, Comprehensive								■		■			
3	Ethambutol												■	
3	Fatty Acid Profile of Lipids								■					
3	Flunitrazepam Screen, Urine								■					
6	Fluoride, Urine				■									
8	Histoplasmosis and Blastomyces Antibodies													■
8	HPV, Genotypes 16 & 18					■								
6	HPV, Genotypes 16 & 18/45 by TMA				■									

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change	Methodology	Reference Range	Days Performed/Reported	CPT	Fee
3	HTLV I/II Antibody Screen										■			
3	Hypersensitivity Pneumonitis I									■				
4	Immune Function Assay ATP						■					■		
4	JAK2 Exon 12 and Non-V617F Mutation							■						
4	Ketamine Confirmation, Urine											■		
4	Mercury, Urine 24 hour									■				
4	Microsporidia Examination							■						
8	Miscellaneous Culture					■								
8	Miscellaneous Culture Screen					■								
4	Neurofibromatosis Type 1, Comprehensive												■	
6	Neuronal Antibodies IgG (Hu, Ri, Yo, & Amphiphysin)				■									
7	Paraneoplastic Syndrome Antibody Panel with reflex				■									
4	PTH, Intact							■	■					
4	Purine and Pyrimidine Panel							■				■		
4	Quantitative Pain Panel, Urine										■	■		
5	SMAD3 Gene Sequencing												■	
8	Streptococcus pneumoniae Antigen					■								
7	Streptococcus pneumoniae Antigen, CSF				■									
7	Streptococcus pneumoniae Antigen Detection				■									
5	Thallium, Blood										■			
5	Thallium, Urine									■	■			
5	Universal Bacterial, Fungal, and AFB PCR												■	
5	Universal PCR, Acid Fast Bacilli												■	
5	Universal PCR, Bacterial												■	
5	Universal PCR, Fungal												■	
8	VW Multimer Panel				■									

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
ACTA2 Gene Sequencing	ACTA2	88528	**CPT: 81479**	5/23/2013
Antimony, Urine	ANTIMU	77009	**Includes:** Antimony, Urine **per volume** Antimony, Urine **per 24 hours** Antimony, Urine **ratio to creatinine** Creatinine, Urine per volume Creatinine, Urine per 24 hours Test build may need to be modified	5/20/2013
Beta Galactosidase, Leukocytes	BGALA	87825	**Reference Range:** ≥ 1.56 **nmol/min/mg** **Days Performed: Wednesday** **Reported:** 9 - 16 days	5/30/2013
Bioavailable Testosterone & SHBG, Female and Children	BTSTFC	88688	**Specimen Requirement:** 1 mL serum from 2 serum separator tubes; Collect between 6 - 10 a.m.; **Separate serum from cells within 2 hours of collection;** Refrigerated	5/20/2013

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Cadmium, Urine	URCAD	87729	**Includes:** Cadmium, Urine **per volume** Cadmium, Urine per 24 hours Cadmium, Urine **ratio to CRT** Creatinine, Urine per 24 hours **Creatinine, Urine per volume** Test build may need to be modified	5/20/2013
Chromium, Urine	UCHRO	82495	**Includes:** Chromium, Urine **per volume** Chromium, Urine **per 24 hours** Chromium, Urine **ratio to creatinine** Creatinine, Urine **per 24 hours** **Creatinine, Urine per volume** Test build may need to be modified **Specimen Requirement: 8 mL** urine from a well mixed 24 hour collection; Refrigerate during collection; Submit specimen in two trace element free containers; Refrigerated	5/20/2013
Cocaine & Benzoylecgonine, Quant	COCAIN	76518	**Includes:** Cocaine Cocaethylene Benzoylecgonine **m-Hydroxybenzoylecgonine (qualitative only)** Test build may need to be modified **Specimen Requirement: 4 mL** serum from a red top tube; Do not use serum separator tubes; **Separate serum from cells within 2 hours of collection;** Refrigerated **Methodology: Gas Chromatography Mass Spectrometry (GCMS)** **Days Performed: Sunday - Saturday** Reported: 2 - **5** days	6/13/2013
COL3A1 Gene Sequencing, Blood	COL3	88543	**CPT: 81479**	5/16/2013
Cryptococcus Antigen Detection	CAD	75306	**Specimen Requirement: 10 mL** serum from a serum separator tube; Refrigerated *OR* 2 mL cerebrospinal fluid (CSF) in a sterile container; Frozen	5/9/2013
DRPLA DNA Test	DRPLA	82268	**Specimen Requirement:** 3 mL whole blood in an EDTA lavender top tube; Ambient; All patients are required to submit a 'Congenital Inherited Diseases Patient Information' sheet. **New York residents only must also include a signed informed consent form. Both forms may be obtained by contacting Client Services at 216.444.5755 or 800.628.6816.**	6/13/2013
Drug Analysis, Comprehensive	DRANCO	82053	**Specimen Requirement:** 10 mL serum from a red top tube *AND* **20 mL** random urine in a clean container; Refrigerated THIS ASSAY REQUIRES MULTIPLE SPECIMEN TYPES **Methodology:** Gas Chromatography - Flame Ionization Detection (GC-FID) Gas Chromatography - Mass Spectrometry (GCMS) Immunoassay (IA) **High Performance Liquid Chromatography (HPLC)**	6/13/2013
Ethambutol	ETHAMB	80342	**Days Performed:** Varies **Reported: 4 - 10** days	5/20/2013
Fatty Acid Profile of Lipids	CFA	76258	**Specimen Requirement: 0.5 mL** serum from a serum separator tube; **Remove serum from cells within 45 minutes of collection and freeze;** Transport Frozen	3/25/2013
Flunitrazepam Screen, Urine	FLUNU	82104	**Specimen Requirement: 3 mL** urine in a clean container from a random collection; Refrigerated	6/13/2013
HTLV I/II Antibody Screen	HTLVSC	50163	**Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)**	5/20/2013
Hypersensitivity Pneumonitis I	HYPNE1	88709	**Includes:** Aspergillus fumigatus #1 **Ab, Precipitin** Aspergillus fumigatus #6 **Ab, Precipitin** Aureobasidium pullulans **Ab, Precipitin** Pigeon serum **Ab, Precipitin** Micropolyspora faeni **Ab, Precipitin** Thermoactinomyces vulgaris #1 **Ab, Precipitin** Test build may need to be modified	5/20/2013

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Immune Function Assay ATP	IMMFUN	82662	**Special Information:** Effective April 29, 2013, all blood sample requests for the Immune Function Assay ATP test will be automatically sent to the outside laboratory ViraCor-IBT as the test performing lab. The manufacturer of ImmuKnow® reagent kits, Cylex Inc., was recently acquired by ViraCor-IBT and all testing will be done solely by ViraCor-IBT laboratory. The ViraCor-IBT assay will be exactly the same as the in-house test offered previously, however there will be a slight difference in the turn-around-time for results. It will change from 1-3 days to 2-3 days. Contact Dr. Belinda Yen-Lieberman or Dr. Thomas Daly with any questions or concerns at 800.628.6816 or 216.444.5755.	4/29/2013
JAK2 Exon 12 and Non-V617F Mutation	JAKNON	87775	**Specimen Requirement: 4** mL whole blood in an EDTA lavender top tube; **A completed "Hematopathology Patient Information Sheet" is required with the specimen. This form is available through Client Services at 216.444.5755 or 800.628.6816. Send specimen to Cleveland Clinic Laboratories on the day of collection.** Ambient	5/6/2013
Ketamine Confirmation, Urine	UKETA	87791	**Days Performed: Monday** **Reported:** 3 - 9 days	5/9/2013
Mercury, Urine 24 hour	UMERC3	79632	**Includes:** Mercury, **Urine per volume** Mercury, **Urine per 24 hour** Mercury, **Urine ratio to CRT** **Creatinine, Urine per volume** **Creatinine, Urine per 24 hour** Test build may need to be modified	5/20/2013
Microsporidia Examination	MICSPO	77086	**Specimen Requirement:** 2 grams stool in a clean container; Transfer approximately 1 gram of feces to each of 2 containers: PVA vial and formalin vial. Fluid levels should reach line on vial. Mix each specimen with the preservative. Indicate on vial label whether stool is formed (soft or hard) or diarrheal; Ambient *OR* **Stool preserved in sodium acetate formalin (SAF); Ambient**	5/9/2013
Neurofibromatosis Type 1, Comprehensive	NFIB1	88611	**CPT: 81407**, 81408, **81265**, 88230	6/6/2013
PTH, Intact	PTHI	83970	**Special Information: Testing cannot be added to plasma from EDTA lavender top tubes older than 8 hours post draw.** **Specimen Requirement:** 1 mL **serum from a serum separator tube;** Separate serum from cells ASAP after clotting has occurred; Refrigerated	5/2/2013
Purine and Pyrimidine Panel	UPURPY	82921	**Specimen Requirement: 3 mL** urine in a clean container from a random collection; **Patient's age is required;** Frozen **Days Performed: Tuesday** **Reported: 8 - 15** days	6/13/2013
Quantitative Pain Panel, Urine	UQNTPP	82347	**Reference Range:** Morphine: **< 5 ng/mL** Codeine: **< 11 ng/mL** Dihydrocodeine: **< 5 ng/mL** Oxycodone: **< 5 ng/mL** Oxymorphone: **< 5 ng/mL** Hydrocodone: **< 8 ng/mL** Hydromorphone: **< 5 ng/mL** Methadone: **< 16 ng/mL** EDDP: **< 6 ng/mL** Fentanyl: **< 6 ng/mL** Norfentanyl: **< 6 ng/mL** Tramadol: **< 25 ng/mL** Desmethyltramadol: **< 20 ng/mL** Buprenorphine: **< 20 ng/mL** Norbuprenorphine: **< 20 ng/mL** Amphetamine: **< 5 ng/mL** Methamphetamine: **< 8 ng/mL** Benzoylecognine: **< 24 ng/mL** 6-Acetylmorphine: < 5 ng/mL Cannabinoid: < 16 ng/mL Creatinine: > 19 mg/dL Urine pH: 4 - 10 Specific Gravity: 1.005 - 1.020 Urine Oxidants: Negative **Days Performed: 4 days per week** **Reported: 2 - 5** days	6/4/2013

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
SMAD3 Gene Sequencing	SMAD3	88524	**CPT: 81479**	5/23/2013
Thallium, Blood	THALL	75659	**Reference Range:** 0.0 - **2.0** µg/L	5/20/2013
Thallium, Urine	UTHAL	84116	**Includes:** Thallium, Urine **per volume** Thallium, Urine **per 24 hour** Thallium, Urine **ratio to CRT** Creatinine, Urine per volume Creatinine, Urine per 24 hour Test build may need to be modified **Reference Range:** Thallium, Urine per volume: 0 - **5** ug/L Thallium, Urine per 24 hour: **Not established** Thallium, Urine ratio to CRT: Not established Creatinine, Urine per volume: Refer to report Creatinine, Urine per 24 hour: Refer to report	5/20/2013
Universal Bacterial, Fungal, and AFB PCR	FABPCR	87871	**CPT: 87551, 87556, 87801x2**	5/9/2013
Universal PCR, Acid Fast Bacilli	AFBPCR	87859	**CPT: 87551, 87556**	5/9/2013
Universal PCR, Bacterial	BACPCR	87852	**CPT: 87801**	5/9/2013
Universal PCR, Fungal	FUNPCR	87854	**CPT: 87801**	5/9/2013

New Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Allergen, Cabbage IgE	CABBAG	89537	**Specimen Requirement:** 0.1 mL serum from a serum separator tube; Refrigerated **Methodology:** Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP **Reference Range:** < 35 kU/L; Class: 0 **Days Performed:** Sunday - Saturday **Reported:** 1 - 2 days **CPT:** 86003 **Price:** $33.00	6/4/2013
Allergen, Grapefruit IgE	GRAFRU	89538	**Specimen Requirement:** 0.1 mL serum from a serum separator tube; Refrigerated **Methodology:** Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP **Reference Range:** < 35 kU/L; Class: 0 **Days Performed:** Sunday - Saturday **Reported:** 1 - 2 days **CPT:** 86003 **Price:** $33.00	6/4/2013
Allergen, Pear IgE	PEAR	89536	**Specimen Requirement:** 0.1 mL serum from a serum separator tube; Refrigerated **Methodology:** Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP **Reference Range:** < 35 kU/L; Class: 0 **Days Performed:** Sunday - Saturday **Reported:** 1 - 2 days **CPT:** 86003 **Price:** $33.00	6/4/2013

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
Allergen, Whole Egg IgE	WHOEGG	89539	**Specimen Requirement:** 0.1 mL serum from a serum separator tube; Refrigerated **Methodology:** Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP **Reference Range:** < 35 kU/L; Class: 0 **Days Performed:** Sunday - Saturday **Reported:** 1 - 2 days **CPT:** 86003 **Price:** $33.00	6/4/2013
Fluoride, Urine	UFLUOR	89540	**Special Information:** Patient should avoid exposure to gadolinium-based contrast media for 48 hours prior to specimen collection **Specimen Requirement:** 6 mL urine in a trace metal free transport tube (ARUP #43116) from a random urine; Collect in a trace metal free or acid-washed plastic container; Trace metal free tubes are available by calling Client Services at 800.628.6816 or 216.444.5755; Refrigerated **Methodology:** Quantitative Ion-Specific Electrode, Colorimetry **Reference Range:** Refer to report **Days Performed:** Varies **Reported:** 4 - 10 days **CPT:** 82735 **Price:** $118.00 (non-discountable)	5/20/2013
HPV Genotypes 16 & 18/45 by TMA	HPVGNO	89544	**Special Information:** This test detects E6/E7 viral messenger RNA of the high-risk HPV types 16, 18, and 45 only. It is intended for use in women 21 years and older with ASC-US cervical cytology results and in women 30 years and older with positive high-risk HPV results. Sensitivity may be affected by specimen collection methods, stage of infection, and the presence of interfering substances. Results should be interpreted in conjunction with other available laboratory and clinical data. This test is not intended for use as a stand-alone test. This test is intended for medical purposes only and is not valid for the evaluation of suspected sexual abuse or for other forensic purposes. HPV testing should not be used for screening or management of atypical squamous cells of undetermined significance (ASCUS) in women under age 21. **Specimen Requirement:** One cervical brush in ThinPrep Pap Test transport media; Females should avoid high concentrations of antifungal cream or contraceptive jelly, and should not douche prior to time of collection; Ambient **Methodology:** Qualitative Target Amplification Nucleic Acid Probe **Reference Range:** Negative **Days Performed:** Tuesday, Thursday **Reported:** 3 - 6 days **CPT:** 87621x2 **Price:** $121.00 (non-discountable)	5/20/2013
Neuronal Antibodies, IgG (Hu, Ri, Yo, & Amphiphysin)	HURIYO	89321	**Special Information:** Only antibodies detected are reported in the result field. **Includes:** Anti-Hu Antibody IgG Anti-Ri Antibody IgG Anti-Yo Antibody IgG Amphiphysin Antibody IgG **Specimen Requirement:** 1 mL serum from a serum separator tube; Remove serum from cells within 2 hours of collection; Frozen **Methodology:** Qualitative Immunoblot **Reference Range:** Anti Hu IgG: None Detected Anti Ri IgG: None Detected Anti Yo IgG: None Detected Amphiphysin IgG: None Detected **Days Performed:** Thursday **Reported:** 2 - 9 days **CPT:** 83516 **Price:** $168.00 (non-discountable)	5/20/2013

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
Paraneoplastic Syndrome Antibody Panel with reflex	PARSYN	89436	**Special Information:** ANNA Antibodies and Purkinje Cell Antibody are screened by IFA. If the ANNA IFA screen is positive at 1:10, then a titer and immunoblot will be added at an additional cost. If the Purkinje cell IFA screen is positive at 1:10, then a titer and immunoblot will be added at an additional cost. **Includes:** Neuronal Nuclear / Purkinje Cell Antibody IgG Screen, by IFA Neuronal Nuclear (Hu, Ri, Yo, & Amphiphysin) Antibodies IgG, Immunoblot (If indicated) Neuronal Nuclear Antibodies IgG (ANNA), IFA Titer (If indicated) Purkinje Cell Antibody IgG, Titer (If indicated) **Specimen Requirement:** 2 mL serum from a serum separator tube; Separate serum from cells within 2 hours of collection; Frozen **Methodology:** Indirect Fluorescent Antibody (IFA) **Reference Range:** Neuronal Nuclear / Purkinje Cell Antibody IgG Screen, by IFA: None Detected **Days Performed:** Wednesday **Reported:** 2 - 10 days **CPT:** 86255 **Price:** $135.00	5/20/2013
Streptococcus pneumoniae Antigen, CSF	SPACSF	89532	**Special Information:** False-positives may occur because of cross-reactivity with other members of the S. mitis group. Clinical correlation is recommended. Patients who have received the S. pneumoniae vaccines may test positive in the 48 hours following the vaccination. It is recommended to avoid testing within 5 days of receiving vaccination. **Specimen Requirement:** 1 mL cerebrospinal fluid (CSF) in a sterile container; Refrigerated **Methodology:** Immunochromatographic **Reference Range:** Negative **Days Performed:** Sunday - Saturday **Reported:** 2 - 3 days **CPT:** 87899 **Price:** $119.00 (non-discountable)	6/17/2013
Streptococcus pneumoniae Antigen Detection	SPNAG	89542	**Special Information:** The Binax NOW Streptococcus pneumoniae assay is available for rapid detection of antigen to Streptococcus pneumoniae in patients with pneumococcal pneumonia. While a positive result is indicative of pneumococcal disease, a negative result does not exclude infection with S. pneumoniae. Antigen levels may be below the detectable limit of the test. False positive results have been reported with other members of the S. mitis group and in patients who have received the pneumococcal vaccine within the last 5 days. This assay has not been validated on body fluids other than urine. Urine specimens with elevated white blood cells, red blood cells, protein, glucose, and turbidity were evaluated and no interference was noted. Very high red cell counts may produce an invalid result. The assay has not been evaluated on patients taking antibiotic for > 24 hours or on patients who have recently completed an antibiotic regimen. **Specimen Requirement:** 2 mL urine in a clean container from a random collection; Refrigerated **Methodology:** Immunochromatographic **Reference Range:** Negative **Days Performed:** Sunday - Saturday **Reported:** 24 hours **CPT:** 87899 **Price:** $133.00	6/17/2013

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
VW Multimer Panel	VWMULP	89323	**Includes:** von Willebrand Multimer Analysis von Willebrand Factor Antigen Ristocetin Co-Factor Factor VIII:C Assay **Specimen Requirement:** 3 mL plasma from a sodium citrate light blue top tube; Frozen **Methodology:** Latex Immunoassay Clotting Assay Electrophoresis Agglutination **Reference Range:** von Willebrand Multimer Analysis: Refer to report von Willebrand Factor Antigen 0 - 2 days: 36 - 315% 2 - 6 days: 50 - 279% 6 - 30 days: 19 - 270% 1 - 4 months: 57 - 226% 4 - 12 months: 23 - 216% 1 - 6 years: 60 - 132% 6 - 11 years: 44 - 158% 11 - 17 years: 46 - 168% 17 - 99 years: 50 - 173% Ristocetin Co-Factor: 35 - 153% Factor VIII:C Assay: 0 - 1 days: 22 - 207% 2 - 5 days: 22 - 179% 6 - 30 days: 25 - 183% 1 - 3 months: 33 - 148% 4 - 11 months: 37 - 127% 1 - 99 years: 50 - 173% **Days Performed:** Monday - Friday **Reported:** 3 - 5 days **CPT:** 85240, 85245, 85246, 85247 **Price:** $586.00	5/2/2013

Fee Reductions

Test Name	Order Code	Billing Code	List Fee	CPT Code
Histoplasmosis and Blastomyces Antibodies	HISBLA	78728	$267.00	86612x2, 86698x3

Discontinued Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
CMT Evaluation, Complete	CMTCOM	82413	This test will no longer be available	6/6/2013
CMT Evaluation, Partial	CMTEVL	82114	This test will no longer be available	6/6/2013
HPV, Genotypes 16 & 18	HPVGEN	88554	This test will no longer be available. Suggest ordering HPV Genotypes 16 & 18/45 by TMA (HPVGNO)	5/20/2013
Miscellaneous Culture	MISCUL	76834	This test will no longer be available	5/16/2013
Miscellaneous Culture Screen	MISCSC	77938	This test will no longer be available	5/16/2013
Streptococcus pneumoniae Antigen	USTREP	82955	This test will no longer be available. Suggest ordering Streptococcus pneumoniae Antigen Detection (SPNAG) or Streptococcus pneumoniae Antigen, CSF (SPACSF).	6/17/2013