



Technical Update • July 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.

Please note the corrected Specimen Requirement for Fungitell Assay for (1,3)-β-D-Glucan on page 4.

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	New Test	Test Discontinued	Specimen Requirement	Special Information	Component Change	Reference Range	Days Performed/Reported	CPT	Fee
6	Allergen, Mouse Epithelium IgE												
7	Allergen, Respiratory Region 8												
7	Alpha-1-Antitrypsin, Stool												
7	Anti Enterocyte Antibodies												
3	Bence Jones Protein, Qt Free Kappa/Lambda Light Chains												
7	Beta-2 Glycoprotein 1 Antibody, IgA												
8	Beta-2-Glycoprotein 1 IgG, IgM & IgA												
7	Beta-2 Transferrin												
7	Beta Galactosidase, Leukocytes												
7	BK Virus Quantitation, Urine												
3	Bordetella pertussis DFA												
3	Bordetella PCR												
7	Brucella IgG / IgM Confirmation												
7	Carnitine Free & Total, Urine												
7	Chlamydia trachomatis, Miscellaneous Sites, NA												
8	Chronic Urticaria Index												
7	CMV PCR, Bone Marrow												
7	Complement, Alternate Pathway (AH50), Functional												
8	Complement C7, Functional												
8	Complement C9, Functional												
8	Cyanide, Blood												
3,8	EBV by PCR Qualitative												

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	New Test	Test Discontinued	Specimen Information	Component Requirement	Reference Change	Methodology	Days Performed/Reported	CPT	Fee
8	Ethyl Glucuronide, Urine reflex to Confirm / Quant												
3	Exposure Profile, Source - Patient												
3	Felbamate												
3	Flunitrazepam, Serum												
4	Fungitell Assay for (1,3)-β-D-Glucan												
4,8	GAD65 Antibody, CSF												
8	Gene Analysis 21 Hydroxylase												
8	Glucagon												
8	Hexosaminidase A & Total, WBC												
4	HIV 1 & 2 Combo (Ag/Ab)												
8	HLA B5701												
8	Human Epididymis Protein 4												
8	Hyperoxaluria, Urine												
8	IBD Serology Disease Panel												
8	Ketamine Confirmation, Urine												
4	Lactate, CSF												
4	Lamotrigine												
8	Liver Kidney Microsome IgG Autoabs												
4	MTHFR												
8	Myasthenia Gravis Evaluation, Adult												
4	Myasthenia Gravis / Lambert-Eaton Syndrome												
8	Mycoplasma hominis PCR												
8	Neisseria gonorrhoeae, Miscellaneous Sites, NA												
4	Neuronal Voltage-Gated Potassium Channel (VGKC) Ab												
8	NMO/Aquaporin-4 IgG Cell Binding Assay, CSF												
4	Oxcarbazepine												
8	Parasite Identification												
5	Paraneoplastic Autoantibody Evaluation, CSF												
5	Paraneoplastic Autoantibody Evaluation, Serum												
8	Phenolphthalein, Stool												
6	PTH, Intact, Fluid												
6	Selenium, Blood												
8	Sulfonylurea Hypoglycemics, Serum												
6,8	Synthetic Glucocorticoid Screen, Serum												
8	Synthetic Glucocorticoid Screen, Urine												
8	Tay-Sachs (Hexosaminidase)												
8	VIP												
6	Vitamin A												
6,8	Whole Mitochondrial Genome with Haplotyping												
6	Zonisamide												

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Bence Jones Protein, Qt Free Kappa/Lambda Light Chains	UBJP	89292	Specimen Requirement: Stability: Ambient: 2 hours Refrigerated: 1 week Frozen: Unacceptable	7/3/2014
Bordetella pertussis DFA	BORDFA	77087	Specimen Requirement: Nasopharyngeal swab in Amies media with or without charcoal or Stuart media; Specimen must be sent to Cleveland Clinic Laboratories on the day of collection; For longer specimen stability please collect swab in Eswab mini-tip transport System (blue top); Refrigerated *OR* Bronchial or trans-tracheal aspirate in Amies collected in Amies with or without charcoal; Refrigerated Stability: Amies/Stuart swab: Ambient: 48 hours Refrigerated: 48 hours Frozen: Unacceptable Eswab transport system: Ambient: Unacceptable Refrigerated: 4 days Frozen: Unacceptable Days Performed: Monday - Friday Reported: 2 - 5 days	6/26/2014
Bordetella PCR	BORPCR	82511	Specimen Requirement: Unspecified Nasopharyngeal Swab; Swabs may be flocced, non-flocced, or charcoal. Please send to Cleveland Clinic Laboratories on the day of collection. Swab may not be from throat; Refrigerated Special Information: Specimen source is required	7/31/2014
EBV by PCR Qualitative	EBPCR	79049	Specimen Requirement: 1 mL whole blood in an EDTA lavender top tube; Refrigerated Stability: Ambient: Not determined Refrigerated: 7 days Frozen: 7 days Methodology: Polymerase Chain Reaction, DNA Probe hybridization Reference Range: Negative Days Performed: Monday, Wednesday, Friday Reported: 3 - 6 days	7/14/2014
Exposure Profile, Source - Patient	HEXP	82618	Special Information: To be ordered by Occupational Health after a body fluid exposure to an employee has occurred. This test is used to determine the Hepatitis B Surface Antigen, HIV 1 & 2 Antigen / Antibody, and Hepatitis C (HCV) Antibody status of an exposure source patient. Methodology not approved for donor testing. Positive HCV Antibody and/or positive HIV 1 & 2 Antigen / Antibody results will be electronically reported to the Ohio Department of Health. CPT: 86803x1, 87340x1, 87389x1	7/29/2014
Felbamate	FELBA	34037	Specimen Requirement: Alternate specimens 2mL serum from a No additive Red or a SST (Gold). Stability: Ambient: 1 week Refrigerated: 1 week Frozen: 1 month	8/4/2014
Flunitrazepam, Serum	FLUNS	82106	Specimen Requirement: 5 mL serum from a red top tube; Minimum: 2.0 mL; Do not use serum separator tubes; Refrigerated Stability: Ambient: 48 hours Refrigerated: 2 weeks Frozen: 1 year Days Performed: Sunday - Saturday Reported: 8 - 10 days	7/31/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Fungitell Assay for (1,3)-B-D-Glucan	BDGLUC	88499	Specimen Requirement: Collect 3-5 mL blood in a serum separator gel tube (SST). Centrifuge specimen within 2 hours. Ship serum gel tube frozen. NOTE: Do not aliquot specimen.	6/17/2014
GAD65 Antibody, CSF	GADCSF	87939	Specimen Requirement: 1 mL cerebrospinal fluid (CSF) in a clean container; Minimum: 0.8 mL ; Refrigerated	6/5/2014
HIV 1 & 2 Combo (Ag/Ab)	HIV12C	82811	CPT: 87389x1	7/31/2014
Lactate, CSF	CLACT	77072	Reference Range: 1.01 - 2.09 mmol/L	7/14/2014
Lamotrigine	LMTR	79375	Specimen Requirement: 2 mL plasma from a Sodium or Lithium Heparin; minimum 0.5 mL, refrigerated. Alternate specimen 2 mL serum from a No additive Red or SST (Gold); refrigerated Stability: Ambient: 24 hours Refrigerated: 1 week Frozen: 1 month	8/4/2014
MTHFR Gene Analysis	MTHF	81692	***Test build may need to be modified*** Specimen Requirement: 1 mL whole blood in an EDTA lavender tube; refrigerated Stability: Ambient: 24 hours Refrigerated: 5 days Frozen: Unacceptable Methodology: Electrochemical Detection, Polymerase Chain Reaction (PCR) Days Performed: Once per week Reported: 7 - 10 days	8/12/2014
Myasthenia Gravis/ Lambert-Eaton Syndrome	LAMBRT	83027	Specimen Requirement: Alternate Specimen 3mL serum from a SST (Gold). Patient should have no general anesthetic or muscle-relaxant drugs in the previous 24 hours. Stability: Ambient: 72 hours Refrigerated: 28 days Frozen: 28 days Reference Range: Striational (Striated Muscle) Ab: 0 - 99 years <1:120 Days Performed: Sunday - Saturday Special Information: Hemolysis is unacceptable for AChR Modulation Antibody. Reflex Algorithm: If AChR modulating antibody is >=90% and striational antibodies are >=1:120, AChR Ganglionic Neuronal Ab and CRMP-5-IgG Western blot will be performed at an additional charge.	6/30/2014
Neuronal Voltage-Gated Potassium Channel (VGKC) Ab	VGKC	84413	Specimen Requirement: Stability: Ambient: 72 hours Refrigerated: 28 days Frozen: 28 days Methodology: Radioimmunoassay (RIA) Days Performed: Tuesday, Thursday, Sunday Special Information: If the AChR modulating antibodies within the Myasthenia Gravis Evaluation are >= 90% and the striational antibodies are >= 1:120, the neuronal voltage-gated potassium channel (VGKC) autoantibody will be performed at an additional charge.	6/30/2014
Oxcarbazepine	OXCARB	81702	Specimen Requirement: 2 mL plasma from a sodium or lithium heparin, minimum 0.5 mL, refrigerated. Stability: Ambient: 24 hours Refrigerated: 1 week Frozen: 1 month	8/4/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Paraneoplastic Autoantibody Evaluation, CSF	PARCSF	87937	Specimen Requirement: Stability: Ambient: 72 hours Refrigerated: 28 days Frozen: 28 days Reported: 4 - 9 days Special Information: Reflex algorithm: If IFA patterns are indeterminate, paraneoplastic autoantibody Western blot will be performed at an additional charge. If IFA pattern suggests presence of Neuromyelitis Optica (NMO), then NMO/Aquaporin-4 IgG will be performed at an additional charge. If client requests or if IFA patterns suggest CRMP-5-IgG, CRMP-5-IgG Western blot will be performed at an additional charge. If IFA pattern suggests GAD65 antibody, GAD65 antibody radioimmunoprecipitation assay will be performed at an additional charge. If IFA patterns suggests presence of Amphiphysin Autoantibody, Amphiphysin Antibody Western blot is performed at an additional charge. If IFA patterns suggest neuronal VGKC autoantibody, then VGKC-complex Antibody IPA is performed at an additional charge. Neuron-restricted patterns of IgG staining that do not fulfill criteria for the listed autoantibodies may be reported as "unclassified antineuronal IgG". If detected, newly identified autoantibody specificities may be reported. Complex patterns that include non-neuronal elements may be reported as "uninterpretable". Titers lower than 1:2 are detectable by recombinant CRMP-5 Western blot analysis. CRMP-5 Western blot analysis will be done on request on stored spinal fluid (held 4 weeks). This supplemental testing is recommended in cases of chorea, vision loss, cranial neuropathy, and myelopathy. Call Cleveland Clinic Client Services at 800.628.6816 and ask them to contact Mayo Neuroimmunology Laboratory at 800.533.1710 or 507.266.5700 to request CRMP-5 WB.	6/30/2014
Paraneoplastic Autoantibody Evaluation, Serum	PARNEO	82929	Specimen Requirement: Stability: Ambient: 72 hours Refrigerated: 28 days Frozen: 28 days Methodology: IFA Titer Assay (if indicated) Reference Range: Striational (Striated Muscle) Ab 0-99 Years: < 1:120 NMDA Receptor: Negative AMPA Receptor: Negative GABA-B-Receptor: Negative Days Performed: Sunday - Saturday Special Information: Reflex Algorithm: If IFA patterns are indeterminate, paraneoplastic autoantibody Western Blot will be performed at an additional charge. If client requests or if IFA patterns suggest CRMP-5-IgG, CRMP-5-IgG Western Blot will be performed at an additional charge. If IFA pattern suggests GAD65 antibody, GAD65 antibody radioimmunoassay will be performed at an additional charge. If IFA suggests presence of Neuromyelitis Optica, NMO/Aquaporin-4 IgG will be performed at an additional charge. If IFA pattern suggests presence of Amphiphysin autoantibody, Amphiphysin Antibody Western Blot will be performed at an additional charge. If ACh receptor binding antibody is >0.02 nmol/L, ACh receptor modulating antibodies and CRMP-5-IgG Western Blot will be performed at an additional charge. If IFA pattern suggest NMDA-R, NMDA-R Antibody CBA and/or NMDA-R Ab IF Titer Assay is performed at an additional charge. If IFA pattern suggest AMPA-R, AMPA-R Ab CBA and/or AMPA-R Ab IF Titer Assay is performed at an additional charge. If IFA pattern suggest GABA-B-R, GABA-B-R Ab CBA and/or GABA-B-R Ab IF Titer Assay is performed at an additional charge. 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".	10/1/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
PTH, Intact, Fluid	FLPTH	83896	Specimen Requirement: 0.5 mL fine needle Aspirate in a clean container, frozen; Specimen must be non-viscous and free of particulate matter. Centrifuge to remove cellular material. Indicate source of specimen. 0.5 mL body fluid in a clean container, 0.5 mL plasma in a sodium or lithium heparin, 0.5 mL plasma from an EDTA lavender tube. Minimum 0.5 mL Stability: Ambient: 8 hours Refrigerated: 24 hours Frozen: 6 months Methodology: Electro Chemiluminescence Immunoassay (ECLIA) Reported: 2 - 3 days	8/5/2014
Selenium, Blood	SELEN	84255	Specimen Requirement: 2 mL whole blood from EDTA(Navy Blue) tube; refrigerated Stability: Ambient: 1 month Refrigerated: 1 month Frozen: 3 months at -20, 6 months at -70	7/28/2014
Synthetic Glucocorticoid Screen, Serum	SGLUCO	88378	Specimen Requirement: 2 mL serum from a red top tube; Minimum 1.1 mL	5/29/2014
Vitamin A	VITA	84590	Reference Range: 0 - 1 years: 0.18 - 0.50 mg/L 2 - 12 years: 0.20 - 0.50 mg/L 13 - 17 years: 0.26 - 0.70 mg/L 18 - 999 years: 0.30 - 1.20 mg/L	9/23/2014
Whole Mitochondrial Genome with Haplotyping	GENHAP	84502	CPT: 81403x4, 81479x4	7/1/2014
Zonisamide	ZONIS	82419	Specimen Requirement: Alternate specimens 2 mL serum from a No additive Red tube or 2 mL from a SST tube; refrigerated. Stability: Ambient: 24 hours Refrigerated: 1 week Frozen: 1 month	8/4/2014

New Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Allergen, Mouse Epithelium IgE	MOUEPI	90018	Specimen Requirement: 0.1mL from a serum separator tube Stability: Ambient: 48 hours Refrigerated: 7 days Frozen: 1 year Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: Specific evaluation of allergic reactions. IgE (kU/L) Interpretation: <0.35, Class 0 - Below Detection 0.35 - 0.69, Class 1 - Low 0.70 - 3.49, Class 2 - Moderate 3.50 - 17.49, Class 3 - High 17.50 - 49.99, Class 4 - Very High 50 - 99.99, Class 5 - Very High >=100, Class 6 - Very High Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 86003 Price: \$33.00	7/15/2014

New Tests (cont.)

Test Name	Order Code	Billing Code	Test Information	Effective Date
Allergen, Respiratory Region 8	RESPR8	90027	Specimen Requirement: 3 mL serum from a serum separator tube; Alternate 3 mL plasma from a Lithium Heparin tube Stability: Ambient: 48 hours Refrigerated: 7 days Frozen: 1 year Methodology: Fluorescent Enzyme Immunoassay (FEIA) by ImmunoCAP Reference Range: Specific evaluation of allergic reactions. IgE (kU/L) Interpretation: <0.35, Class 0 - Below Detection 0.35 - 0.69, Class 1 - Low 0.70 - 3.49, Class 2 - Moderate 3.50 - 17.49, Class 3 - High 17.50 - 49.99, Class 4 - Very High 50 - 99.99, Class 5 - Very High ≥100, Class 6 - Very High Days Performed: Sunday - Saturday Reported: 1 - 2 days CPT: 82785x1, 86003 Price: \$1,018.00	7/15/2014
Beta-2 Glycoprotein 1 Antibody, IgA	BETAA	90028	Specimen Requirement: 0.5 mL serum from a serum separator tube; Minimum: 0.3 mL; Separate serum from cells ASAP or within 2 hours of collection; Refrigerated Stability: After separation from cells: Ambient: 48 hours Refrigerated: 2 weeks Frozen: 1 year (avoid repeated freeze / thaw cycles) Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA) Reference Range: 0 - 20 SAU Days Performed: Sunday - Saturday Reported: 2 - 3 days CPT: 86146 Price: \$70.00	7/9/2014

Fee Increases

Test Name	Order Code	Billing Code	List Fee	CPT Code	Effective Date
Alpha-1-Antitrypsin, Stool	STA1A	76362	\$188.00 (non-discountable)	82103	7/1/2014
Anti Enterocyte Antibodies	ENTERO	84499	\$616.00 (non-discountable)	88347x3	7/1/2014
Beta-2 Transferrin	B2TRAN	82885	\$433.00 (non-discountable)	86335	7/1/2014
Beta Galactosidase, Leukocytes	BGALA	87825	\$393.00 (non-discountable)	82657	7/1/2014
BK Virus Quantitation, Urine	UBKQT	82799	\$377.00 (non-discountable)	87799	7/1/2014
Brucella IgG / IgM Confirmation	BRUCON	84467	\$190.00 (non-discountable)	86622	7/1/2014
Carnitine Free & Total, Urine	UCARN1	79813	\$340.00 (non-discountable)	82379	7/1/2014
Chlamydia trachomatis, Miscellaneous Sites, NA	NAACT	89717	\$166.00 (non-discountable)	87491	7/1/2014
CMV PCR, Bone Marrow	CMVBM	89659	\$376.00 (non-discountable)	87496	7/1/2014
Complement, Alternate Pathway (AH50), Functional	COMAP	88533	\$212.00 (non-discountable)	86161	7/1/2014

Fee Increases (cont.)

Test Name	Order Code	Billing Code	List Fee	CPT Code	Effective Date
Complement C7, Functional	C7FUN	87793	\$199.00 (non-discountable)	86161	7/1/2014
Complement C9, Functional	C9FUN	87809	\$199.00 (non-discountable)	86161	7/1/2014
Cyanide, Blood	CYANID	82600	\$243.00 (non-discountable)	82600	7/1/2014
GAD65 Antibody, CSF	GADCSF	87939	\$309.00 (non-discountable)	86341	7/1/2014
Gene Analysis 21 Hydroxylase	21GENE	88173	\$1,335.00 (non-discountable)	81402, 81405	7/1/2014
Glucagon	GLUCA	82943	\$265.00 (non-discountable)	82943	7/1/2014
Hexosaminidase A & Total, WBC	TAYSAC	82868	\$438.00 (non-discountable)	83080x2	7/1/2014
HLA B5701	B5701	84337	\$540.00 (non-discountable)	81381	7/1/2014
Human Epididymis Protein 4	HEP4	88459	\$185.00 (non-discountable)	86305	7/1/2014
Hyperoxaluria, Urine	UHYPER	87816	\$399.00 (non-discountable)	82544	7/1/2014
IBD Serology Disease Panel	IBDSER	88298	\$455.00 (non-discountable)	83520x2, 86255	7/1/2014
Ketamine Confirmation, Urine	UKETA	87791	\$218.00 (non-discountable)	80299	7/1/2014
Myasthenia Gravis Evaluation, Adult	MYGRAV	82922	\$599.00 (non-discountable)	83519x2, 83520	7/1/2014
Mycoplasma hominis PCR	MYPCR	8844	\$432.00 (non-discountable)	87798	7/1/2014
Neisseria gonorrhoeae, Miscellaneous Sites, NA	NAAGC	89712	\$165.00 (non-discountable)	87591	7/1/2014
Parasite Identification	PARAID	81636	\$45.00	87168 (tick, arthropod) or 87169 (mite/worm)	8/1/2014
Phenolphthalein, Stool	PHENO	75755	\$75.00 (non-discountable)	84311	7/1/2014
Synthetic Glucocorticoid Screen, Serum	SGLUCO	88378	\$255.00 (non-discountable)	82544	7/1/2014
Synthetic Glucocorticoid Screen, Urine	UGLUCO	88379	\$283.00 (non-discountable)	82544	7/1/2014
Tay-Sachs (Hexosaminidase)	HEX	76985	\$265.00 (non-discountable)	84999	7/1/2014
VIP	VIP	75079	\$405.00 (non-discountable)	84586	7/1/2014

Fee Reductions

Test Name	Order Code	Billing Code	List Fee	CPT Code	Effective Date
EBV by PCR Qualitative	EBPCR	79049	\$105.00 (non-discountable)	87798	7/1/2014
Ethyl Glucuronide, Urine reflex to Confirm / Quant	UEGLUC	89509	\$75.00 (non-discountable)	80101	7/1/2014
Liver Kidney Microsome IgG Autoantibodies	LKM	76521	\$67.00 (non-discountable)	86376	7/1/2014
NMO / Aquaporin-4 IgG Cell Binding Assay, CSF	FNMOA4	89630	\$215.00 (non-discountable)	86255	7/1/2014
Sulfonylurea Hypoglycemics, Serum	SULFON	82893	\$99.00 (non-discountable)	83788	7/1/2014
Whole Mitochondrial Genome with Haplotyping	GENHAP	84502	\$4,400.00 (non-discountable)	81403x4, 81479x4	7/1/2014

Discontinued Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Beta-2-Glycoprotein 1 IgG, IgM & IgA	B2GPI	82497	This test will no longer be available. Suggest ordering Beta-2 Glycoprotein, IgG (BETA2G), Beta-2 Glycoprotein, IgM (BETA2M), and Beta-2 Glycoprotein, IgA (BETAA)	7/9/2014
Chronic Urticaria Index	CUINDX	88106	This test will no longer be available.	8/5/2014