



Technical Update • June 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	New Test	Special Information	Specimen Requirement	Component Change	Methodology	Reference Range	Days Performed/Reported	CPT
3	Alpha-1-Antitrypsin Quantitation and Phenotyping											
7	Anti-Sperm Antibody Screen, Serum											
7	Anti-Sperm Antibody Titer, Serum											
3	BLAU Syndrome NOD2/CARD15 Complete Gene Analysis											
3	Blood Parasites											
3	Calprotectin, Fecal											
7	CALR (Calreticulin) Exon 9 Mutation Analysis											
3	DPD 5-FU GenotypR											
3	Ethosuximide											
3	Familial Mediterranean Fever, Complete											
3	FISH for 1p36											
3	FISH for 5q Abnormalities											
3	FISH for 8;21 Translocation for AML											
3	FISH for Acute Myeloid Leukemia Panel											
3	FISH for ALK (2p23) FFPET NSCLC											
4	FISH for ALK (2p23) Translocation											
4	FISH for B Lymphoblastic Leukemia Panel											
4	FISH for BCL2 Translocations											
4	FISH for BCL6 Translocations											
4	FISH for BCR/ABL											
4	FISH for BIRC3/MALT1 Translocation											
4	FISH for BK Virus											

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	New Test	Specimen Information	Component Requirement	Methodology	Reference Range	Days Performed/Reported	CPT
4	FISH for CBF/MYH11										
4	FISH for CCND1 (Blood or Bone Marrow)										
4	FISH for CCND1 (Paraffin)										
4	FISH for Chromosome 19q										
4	FISH for Chronic Lymphocytic Leukemia										
4	FISH for Cutaneous Melanoma										
4	FISH for DDIT3 (12q13)										
4	FISH for EGFR										
4	FISH for Ewings Sarcoma										
4	FISH for FGFR1										
4	FISH for FOXO1A gene (13q14)(FKHR)										
4	FISH for FUS gene (16p11)										
4	FISH for HER-2										
4	FISH for IgH/BCL2										
4	FISH for IgH/CCND1										
4	FISH for IgH/MALT1 Translocation										
4	FISH for IgH Translocations										
4	FISH for MALT 1 (18q21)										
4	FISH for MDM2										
4	FISH for MLL										
4	FISH for MYC (8q24)										
4	FISH for Myelodysplasia										
4	FISH for Myeloproliferative Neoplasms Panel										
4	FISH for PDGFRA										
4	FISH for PML/RARA										
4	FISH for RARA										
4	FISH for SYT gene (18q11)										
4	FISH for t(8;14)(q24;q32)										
5	FISH for t(12;21)(p13q;22)										
5	FISH for Trisomy 4,10, and 17										
5	Fungitell Assay for (1,3)-β-D-Glucan										
5	Helicobacter pylori Antigen, Stool										
5	HIV 1 & 2 Combo (Ag/Ab)										
7	HIV-2 Antibody, EIA										
5	KIT Gene Mutation AML										
7	LC-MS/MS Thyroglobulin measurement for Thyroglobulin Antibody Interference										
5	LH with Tanner Stages										
5	M. tuberculosis Amplified, CSF										
5	Meconium Drug Screen 5										
6	Microscopic Examination for Ehrlichia and Anaplasma										
6	Muckle Wells Syndrome										
6	MVK Testing in Hyper-IgD Syndrome										

Test Update Page #	Summary of Changes by Test Name	Order Code	Billing Code	Name Change	Test Discontinued New Test	Specimen Information	Component Requirement	Reference Range	Days Performed/Reported	CPT
6	Myelin Antibody IgG, IFA									
6	NMR LipoProfile									
7	OncoChip Copy Number									
7	Oxycodone, Urine Screen									
6	Pancreatic Elastase, Fecal									
6	Parasite Identification									
6	PDGFRB Rearrangement by FISH									
6	Plasma Cell Myeloma by FISH									
6	Toxoplasma PCR									
6	TRAPS/Familial Hibernian Fever									
6	VWD Type 2A, 2B, 2M Exon 28 Sequence Analysis									
6	Whole Mitochondrial Genome with Haplotyping									

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Alpha-1-Antitrypsin Quantitation and Phenotyping	PHA1A	84187	CPT: 82103, 82104	7/1/2014
BLAU Syndrome NOD2/CARD15 Complete Gene Analysis	BLAU	88320	Specimen Requirement: 12 mL whole blood in EDTA lavender top tubes; Please collect at least 2 specimen tubes; Minimum: 3 mL; Collect Monday - Wednesday only; Send to Cleveland Clinic Laboratories on the day of collection; Ambient	6/26/2014
Blood Parasites	BLDPAR	87587	Order Code: Previously MALARI	7/1/2014
Calprotectin, Fecal	CALPRO	88413	Specimen Requirement: Collect stool in a preservative free, sterile container . Transfer 5 g of stool into an ARUP (#40910) transport vial. Minimum: 1 g; Refrigerated; Call Client Services at 800.686.6816 or 216.444.5755 for the transport vials. Days Performed: Monday - Saturday Reported: 2 - 4 days	8/5/2014
DPD 5-FU GenotypR	5FU	84203	Days Performed: Monday, Thursday Reported: 6 - 7 days	7/3/2014
Ethosuximide	ETHOS	82692	Order Code: Previously ETHO	5/19/2014
Familial Mediterranean Fever, Complete	FAMMED	82936	Specimen Requirement: 8 mL whole blood in at least 2 EDTA lavender top tubes; Minimum: 1 mL; Please include reason for testing; Ambient	7/31/2014
FISH for 1p36	1PFISH	81886	CPT: 88368x1	7/1/2014
FISH for 5q Abnormalities	5QFSH	84289	CPT: 88275, 88291, 88271x2	7/1/2014
FISH for 8;21 Translocation for AML	AMLFISH	82515	CPT: 88275, 88291, 88271x2	7/1/2014
FISH for Acute Myeloid Leukemia Panel	FAMLPN	89722	CPT: 88291, 88271x8, 88275x4	7/1/2014
FISH for ALK (2p23) FFPET NSCLC	FSHLNG	88844	CPT: 88368x1	7/1/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
FISH for ALK (2p23) Translocation	ALKFSH	84330	Test Name: Previously FISH for ALK Non Hodgkin's Lymphoma CPT: 88368x1	5/7/2014 7/1/2014
FISH for B Lymphoblastic Leukemia Panel	FSHBLL	89721	CPT: 88271x9, 88275x4, 88291	7/1/2014
FISH for BCL2 Translocations	BCL2FSH	84408	CPT: 88368x1	7/1/2014
FISH for BCL6 Translocations	BCL6FH	87605	CPT: 88368x1	7/1/2014
FISH for BCR/ABL	BCRFSH	81834	CPT: 88275, 88291, 88271x2	7/1/2014
FISH for BIRC3/MALT1 Translocation	BMALFH	88037	CPT: 88368x1	7/1/2014
FISH for BK Virus	BKVFSH	87808	CPT: 88365	7/1/2014
FISH for CBFβ/MYH11	INV16F	82804	CPT: 88291, 88271x2, 88275	7/1/2014
FISH for CCND1 (Blood or Bone Marrow)	CCND1F	88681	CPT: 88271x2, 88275, 88291	7/1/2014
FISH for CCND1 (Paraffin)	n/a	88674	CPT: 88368x1	7/1/2014
FISH for Chromosome 19q	19QFISH	82271	CPT: 88368x1	7/1/2014
FISH for Chronic Lymphocytic Leukemia	CLLFSH	83344	CPT: 88291, 88271x5, 88275x2	7/1/2014
FISH for Cutaneous Melanoma	CMFISH	89257	CPT: 88368x1	7/1/2014
FISH for DDIT3 (12q13)	CHOP	83757	CPT: 88368x1	7/1/2014
FISH for EGFR	EGFRFISH	82087	CPT: 88368x1	7/1/2014
FISH for Ewings Sarcoma	EWFSH	82671	CPT: 88368x1	7/1/2014
FISH for FGFR1	FGFR1F	88770	CPT: 88271x2, 88275, 88291	7/1/2014
FISH for FOXO1A gene (13q14)(FKHR)	FKHR	83763	CPT: 88368x1	7/1/2014
FISH for FUS gene (16p11)	FSHFUS	83758	CPT: 88368x1	7/1/2014
FISH for HER-2	n/a	80306	CPT: 88368x1	7/1/2014
FISH for IgH/BCL2	FSHFCL	81939	CPT: 88368x1	7/1/2014
FISH for IgH/CCND1	FSHMCL	81940	CPT: 88368x1	7/1/2014
FISH for IgH/MALT1 Translocation	IGMFAH	88038	CPT: 88368x1	7/1/2014
FISH for IgH Translocations	IGHFSH	84364	CPT: 88368x1	7/1/2014
FISH for MALT 1 (18q21)	FISHMALT1	82803	CPT: 88368x1	7/1/2014
FISH for MDM2	MDM2FH	84397	CPT: 88368x1	7/1/2014
FISH for MLL	MLLFSH	82703	CPT: 88271x2, 88275, 88291	7/1/2014
FISH for MYC (8q24)	FSHMYC	82773	CPT: 88368x1	7/1/2014
FISH for Myelodysplasia	FSHMDS	84379	CPT: 88275x3, 88291, 88271x6	7/1/2014
FISH for Myeloproliferative Neoplasms Panel	MPNFSH	89510	CPT: 88271x9, 88291, 88275x4	7/1/2014
FISH for PDGFRA	PDGFRA	88699	CPT: 88275, 88291, 88271x3	7/1/2014
FISH for PML/RARA	APLFSH	82272	CPT: 88275, 88291, 88271x2	7/1/2014
FISH for RARA	RARFSH	82695	CPT: 88271x2, 88275, 88291	7/1/2014
FISH for SYT gene (18q11)	FISHSYT	82787	CPT: 88368x1	7/1/2014
FISH for t(8;14) (q24;q32)	FSH T8 14	82760	CPT: 88368x1	7/1/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
FISH for t(12;21) (p13q;22)	1221FH	82805	CPT: 88275, 88291, 88271x2	7/1/2014
FISH for Trisomy 4,10, and 17	COGFSH	84172	CPT: 88271x3, 88275, 88291	7/1/2014
Fungitell Assay for (1,3)-β-D-Glucan	BDGLUC	88499	<p>Special Information: Fungitell Titer is available upon request, on original sample tested at ViraCor-IBT for Fungitell Assay with results > 500 pg/mL. Patients with gram positive bacteremia, may have lowered assay specificity. Patients with renal failure on hemodialysis utilizing cellulose membranes may have false positive results. Patients require 3 - 4 days for the restoration of baseline levels of serum (1,3)-β-D-glucan after being treated with fractionated blood products such as albumin and immunoglobulin and being exposed to glucan-containing gauze. Heel or finger stick samples are unacceptable because of the alcohol soaked gauze used to prepare the site. The performance of this assay has not been evaluated with specimens from neonates and infants < 6 months of age. Patients whose GI tract is colonized with Candida and have mucositis may have a positive result without invasive fungal disease.</p> <p>Specimen Requirement: 0.5 mL serum from a serum separator tube; Remove serum from cells within 2 hours of collection; Minimum: 0.2 mL; Frozen</p> <p>Methodology: Limulus Amebocyte Lysate (LAL) Pathway</p> <p>Days Performed: Monday - Saturday</p> <p>Reported: 2 - 4 days</p>	6/17/2014
Helicobacter pylori Antigen, Stool	SHPYLR	82624	<p>Specimen Requirement: 5 g stool in a preservative free, sterile container; Minimum: 1 g; Within 2 hours of collection, transfer 5 g stool into an ARUP (#40910) transport vial. Frozen; Call Client Services at 800.686.6816 or 216.444.5755 for transport vials. Gastric specimens, swabs, tissue and specimens in media or preservatives are not acceptable</p>	8/5/2014
HIV 1 & 2 Combo (Ag/Ab)	HIV12C	82811	<p>Test Name: Previously HIV 1 & 2 Antibody Screen</p> <p>Order Code: Previously HIV12</p> <p>Special Information: For Interfaced clients only, test build may need to be modified</p> <p>Specimen Requirement: 1 mL serum from a serum separator tube; Refrigerated</p>	7/31/2014
KIT Gene Mutation AML	KITAML	84158	CPT: 81404, G0452	6/2/2014
LH with Tanner Stages	LHTAN	89441	<p>Reference Ranges:</p> <p>Female: Tanner Stage I: ≤ 1.5 mU/mL Tanner Stage II: ≤ 5.0 mU/mL Tanner Stage III: ≤ 9.0 mU/mL Tanner Stage IV - V: 0.41 - 15.0 mU/mL</p> <p>Male: Tanner Stage I: 0.0 - 1.0 mU/mL Tanner Stage II: 0.0 - 3.6 mU/mL Tanner Stage III: 0.2 - 6.4 mU/mL Tanner Stage IV - V: 0.6 - 7.0 mU/mL</p>	6/9/2014
M. tuberculosis Amplified, CSF	MTBCSF	88029	<p>Special Information: The method used in the test is Real-Time PCR of the IS 6110 locus of the M. tuberculosis complex. This is an amplified method used to detect M. tuberculosis complex nucleic acid in the raw specimen. It is used to aid the physician in the rapid diagnosis and treatment of a possible tuberculosis infection. A negative result does not rule out disease. Results should be supported by additional alternate testing.</p> <p>Specimen Requirement: 3 mL cerebrospinal fluid (CSF) in a sterile container; Minimum volume: 1 mL; Refrigerated</p> <p>Methodology: Polymerase Chain Reaction (PCR)</p> <p>Reference Range: Not detected</p> <p>Days Performed: Monday - Saturday</p> <p>Reported: 4 - 6 days</p>	6/2/2014
Meconium Drug Screen 5	MECD5	82109	<p>Special Information: Positive results are confirmed by Chromatography with Mass Spectrometry at no additional charge.</p> <p>Methodology: Immunoassay (IA), Chromatography with Mass Spectrometry (if indicated)</p> <p>Days Performed: Sunday - Saturday</p> <p>Reported: 3 - 4 days</p>	7/17/2014

Test Changes (cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Microscopic Examination for Ehrlichia and Anaplasma	ERLSMR	88858	Order Code: Previously EHRL	7/1/2014
Muckle Wells Syndrome	MUCKLE	82909	Specimen Requirement: 8 mL whole blood in at least 2 EDTA lavender top tubes; Ambient Days Performed: Monday - Friday Reported: 6 - 7 weeks	7/31/2014
MVK Testing in Hyper-IgD Syndrome	MVK	83020	Specimen Requirement: 8 mL whole blood in at least 2 EDTA lavender top tubes; Collect Monday - Wednesday only; Minimum: 2 mL; Send to Cleveland Clinic Laboratories on the day of collection; Ambient	7/31/2014
Myelin Antibody IgG, IFA	MYABG	89835	Special Information: This test is approved for patients residing in New York state. Days Performed: Thursday Reported: 3 - 10 days	5/13/2014
NMR LipoProfile	NMRLIP	82739	Includes: Source LDL Particle Number Total Cholesterol Triglycerides HDL Cholesterol LDL Cholesterol (calculated) HDL-P Small LDL-P LDL Size LDL Particle Size VLDL Size HDL Size LP-IR Score For interfaced clients, test build will need to be modified	8/5/2014
Pancreatic Elastase, Fecal	PANCEF	83044	Specimen Requirement: 5 g stool in a preservative free, sterile container ; Minimum: 1 g; Within 4 hours of collection, transfer 5 g stool into an ARUP (#40910) stool transport vial and Freeze. Call Client Services at 800.686.6816 or 216.444.5755 for transport vials. Days Performed: Monday, Wednesday, Friday Reported: 2 - 5 days	8/5/2014
Parasite Identification	PARAID	81636	Special Information: Based on which type of organism is identified, the appropriate 'microbiology bill only code' will be added. CPT: 87169 (worms/mites) 87168 (ticks/arthropods)	8/1/2014
PDGFRB Rearrangement by FISH	PDGFRB	87770	CPT: 88275, 88291, 88271x2	7/1/2014
Plasma Cell Myeloma by FISH	FSHPCM	88367	CPT: 88291, 88275x2, 88271x4	7/1/2014
Toxoplasma PCR	TXPCR	81737	Methodology: Real-time Polymerase Chain Reaction (RTPCR) Days Performed: Sunday - Saturday Reported: 2 - 3 days	6/5/2014
TRAPS/Familial Hibernian Fever	TRAPS	82892	Specimen Requirement: 8 mL whole blood in at least 2 EDTA lavender top tubes; Minimum: 2 mL; Refrigerated	7/31/2014
VWD Type 2A, 2B, 2M Exon 28 Sequence Analysis	EXON28	82907	Test Name: Previously von Willebrand Exon 28 Sequence Analysis	6/16/2014
Whole Mitochondrial Genome with Haplotyping	GENHAP	84502	Specimen Requirement: 4 mL whole blood in an EDTA lavender top tube; Minimum: 2 mL; Specimen must be received at Cleveland Clinic Laboratories on the day of collection; Ambient Days Performed: Monday - Friday Reported: 3 - 5 weeks CPT: 81403x4, 81479x4	7/1/2014

New Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
CALR (Calreticulin) Exon 9 Mutation Analysis	CALR	89979	<p>Special Information: This test detects only exon 9 indel mutations and does not detect mutations in other regions of the CALR gene. Analytical sensitivity is 5% mutant allele burden or 10% heterozygous mutant cells. Specimens from patients residing in New York state will be forwarded to a New York DOH approved laboratory.</p> <p>Specimen Requirement: 4 mL whole blood in an EDTA lavender top tube; Minimum: 1 mL; Refrigerated</p> <p>Methodology: Polymerase Chain Reaction (PCR), Capillary Electrophoresis (CE)</p> <p>Days Performed: Sunday, Tuesday - Friday</p> <p>Reported: 3 - 8 days</p> <p>CPT: 81479</p> <p>Price: \$350.00 (non-discountable)</p>	7/3/2014
LC-MS/MS Thyroglobulin measurement for Thyroglobulin Antibody Interference	TGMSMS	89977	<p>Special Information: This test should only be ordered in patients with documented evidence of thyroglobulin antibodies.</p> <p>Specimen Requirement: 0.5 mL serum from a serum separator tube; Minimum: 0.5 mL; Refrigerated</p> <p>Methodology: High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)</p> <p>Reference Range: Adults: < 0.4 ng/mL</p> <p>Days Performed: Monday, Thursday</p> <p>Reported: 6 - 10 days</p> <p>CPT: 84432</p> <p>Price: \$200.00 (non-discountable)</p>	7/10/2014
Oxycodone, Urine Screen	UOXYC	89981	<p>Special Information: Cutoff threshold at 100 ng/mL. Immunoassay screen only. If clinically indicated, confirmation by MS testing may be requested on the same specimen through Client Services at 800.628.6816 or 216.444.5755.</p> <p>Specimen Requirement: 5 mL random urine in a clean container; Minimum: 3 mL; Refrigerated</p> <p>Methodology: Fluorescence Polarization Immunoassay (FPIA)</p> <p>Reference Range: Negative</p> <p>Days Performed: Sunday - Saturday</p> <p>Reported: 8 hours</p> <p>CPT: 80101</p> <p>Price: \$51.00</p>	6/2/2014

Discontinued Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
Anti-Sperm Antibody Screen, Serum	SESCRN	21190	This test will no longer be available	6/9/2014
Anti-Sperm Antibody Titer, Serum	SETIT	21192	This test will no longer be available	6/9/2014
HIV-2 Antibody, EIA	HIV2T	76192	This test will no longer be available	6/16/2014
OncoChip Copy Number	CNE	88012	This test will no longer be available. Suggest ordering Oncologic CytoScan HD SNP Array (HDSNP)	6/12/2014