Cleveland Clinic

Cleveland Clinic Laboratories

Technical Update • February 2017

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 and billing codes are provided.

To compare the new information with previous test information, refer to the online Test Directory at 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.

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(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
16	50 gram, non-fasting, 1-hour, gestational glucose screen				■										
16	75 gram, fasting, 2-hour, non-gestational glucose tolerance				■										
17	75 gram, fasting, 5-hour, non-gestational glucose tolerance				■										
18	100 gram, fasting, 3-hour gestational glucose tolerance confirmation				■										
4	Aluminum						■					■			
4	Aluminum, Urine 24 Hour						■					■			
4	Antimony, Blood						■					■			
5	Arsenic, Fractionated Urine						■					■			
5	Chromium, Serum						■					■			
5	Chromium, Urine						■					■			
5	Cyanide, Blood							■		■					
5	Cyclosporine												■		
6	Cytology, SurePath Liquid-Based Pap Test						■	■				■			
6	Cytology, SurePath Liquid-Based Pap test and Human Papillomavirus (HPV), High Risk by PCR, SurePath (for routine co-testing in women over 30)						■	■							
6	Cytology, SurePath Liquid-Based Pap Test with Reflex to human Papillomavirus (HPV), High Risk by PCR, SurePath						■	■							

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7	DNA Content, Cell Cycle Analysis, Ploidy and S-Phase						■	■							
7	FISH for CCND1 (Paraffin)													■	
23	FISH for Trisomy 4,10 and 17					■									
18	FISH for Trisomy 4 and 10				■										
7	FK506												■		
7	FSHD DNA Test						■	■					■		
7	Gene Analysis 21 Hydroxylase											■	■		
23	Gluc/Insulin Tolerance Panel					■									
23	Glucose, 2hr Postprandial					■									
8	Glucose, Fasting						■	■			■		■		
23	Glucose Screen, Pregnancy					■									
23	Glucose Tolerance, Five-Hour					■									
23	Glucose Tolerance, Four-Hour					■									
23	Glucose Tolerance, GEST					■									
23	Glucose Tolerance, Three-Hour					■									
23	Glucose Tolerance, Two-Hour					■									
19	Helicobacter pylori Antigen by EIA, Stool				■										
23	Helicobacter pylori Antigen, Stool					■									
8	Herpesvirus 6 PCR, Quant, CSF			■			■	■					■		
19	Herpesvirus 6 PCR, Quant, Plasma				■										
8, 9	Herpesvirus 7 PCR, Quant, CSF			■			■	■					■		
9	Manganese, Serum											■			
9	Measles IgG Antibody												■		
20	Methaqualone, GC/MS, Urine				■										
9	Mumps IgG Antibody												■		
9	Mycoplasma pneumoniae IgG												■		
9	Mycoplasma pneumoniae IgM Antibody												■		
9	NAbFeron Ab						■					■			
9	Nickel, Serum											■			
20	Peanut Component Panel				■										
9	Prealbumin							■					■		
10	Pregnenolone						■	■		■	■	■	■		
11–13, 23	Purine and Pyrimidine Panel							■	■		■	■	■		■
14	Rabies Antibody						■	■		■	■	■	■	■	
21	Staph aureus PCR				■										
14	Syphilis IgG (T pallidum)						■		■		■		■		
15	Syphilis IgG with Confirmation								■		■		■		
15	Thyroglobulin Antibody												■		
15	Thyroid Peroxidase Antibody												■		
21	TPMT Genotyping Assay				■										

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(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
23	Treponema Pallidum Antibody, IgG					■									
22	Treponema Pallidum IgG				■										
15	Varicella-Zoster IgG Ab												■		
15	Varicella Zoster IgG Ab, CSF						■								
15	Vitamin B1, Whole Blood						■	■				■			

Specimen collection with eSwab now available

The eSwab system from Copan Diagnostics is a liquid-based multi-purpose collection and transport system that maintains viability of aerobic, anaerobic, and fastidious bacteria. The eSwab system consists of a flocked swab and a screw-capped transport tube containing 1 mL of liquid Amies medium.

eSwab collects and releases more specimen, improving the recovery of pathogens. The eSwab system generates 1 mL of patient sample, providing a uniform sample for culture and reducing the need to collect multiple swabs.

eSwab may be used instead of a traditional dual swab in Amies or Stuart transport medium for the following tests:

- Anaerobe Culture* (ANACUL)
- Cystic Fibrosis Respiratory Culture (CFRCUL)
- Ear Culture and Stain (EARCSM)
- Eye Culture and Stain (EYECSM)
- Fungal Culture, non-dermal sites* (FCUL, FCULSM)
- Fungal Screen for Candida (FUNGSC)
- Group A Strep PCR (GASPCR)
- MRSA / *S. aureus* Culture Screen (SANSAL)
- Throat Culture (THRCUL)
- VRE Culture (VRESC)
- Wound Culture and Stain* (WCUL)

*Tissue or fluid is preferred over a swab for anaerobe, wound, and fungal cultures whenever possible.

Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Aluminum	ALUM	75004	**Special Information:** Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). **Unacceptable conditions: Plasma. Separator tubes. Specimens that are not separated from the red cells or clot within 6 hours. This test is New York DOH approved.** **Clinical Information: Serum aluminum may be useful in the assessment of aluminum toxicity due to dialysis and is the preferred test for routine screening.** Serum Aluminum **> 50 µg/L** is consistent with overload and may correlate with toxicity. **Days Performed: Tuesday, Thursday, Saturday** **Reported:** 2–5 days	2/21/17
Aluminum, Urine 24 Hour	UAL24	75005	**Special Information:** Diet, medication and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals and nonessential over-the-counter medications (upon the advice of their physician). High concentrations of iodine may interfere with elemental testing. Abstinence from iodine-containing medications or contrast agents for at least 1 month prior to collecting specimens is recommended. ARUP studies indicate that refrigeration of urine alone, during and after collection, preserves specimens adequately, if tested within 14 days of collection. Urine collected within 48 hours of administration of a gadolinium (Gd) containing contrast media (may occur with MRI studies) and acid-preserved samples are unacceptable. **Specimens contaminated with blood or fecal material are unacceptable. Also unacceptable are specimens transported in non-trace element-free transport tubes (with the exception of the original device). This test is New York DOH approved.** **Clinical Information: Urine aluminum may be useful for monitoring aluminum exposure and is preferred in the assessment of chronic exposure.** Elevated levels should be confirmed with a second specimen due to a high susceptibility of specimen to collection related environmental contamination. **Days Performed: Tuesday, Thursday,** Saturday **Reported:** 2–6 days	2/21/17
Antimony, Blood	ANTMBL	77008	**Special Information:** Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). **Unacceptable conditions: Heparin anticoagulant. Frozen specimens. This test is New York DOH approved.** **Clinical Information: Blood antimony levels predominantly reflect recent exposure and are most useful in the diagnosis of acute poisoning. Blood concentrations in unexposed individuals rarely exceed 10 µg/L. The form of antimony greatly influences distribution and elimination. Trivalent antimony readily enters red blood cells, has an extended half-life on the order of weeks to months, and is eliminated predominantly through the bile. Pentavalent antimony resides in the plasma, has a relatively short half-life on the order of hours to days, and is eliminated predominantly through the kidneys. Reported symptoms after toxic antimony exposure vary based upon route of exposure, duration and antimony source and may include abdominal pain, dyspnea, nausea, vomiting, dermatitis and eye irritation. Clinical presentation is similar to that of inorganic arsenic exposure.** **Days Performed: Monday, Wednesday,** Friday **Reported:** 2–6 days	2/21/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Arsenic, Fractionated Urine	UASFR	88171	**Special Information:** Indicate total volume. Submit a Heavy Metal requisition with the specimen. Provide all required demographics to meet State Health Department requirements. Urine collected within 48 hours after administration of a gadolinium (Gd) containing contrast media (may occur with MRI studies) or acid preserved urine specimens are not acceptable. Specimens contaminated with blood or fecal material or specimens transported in non-trace element-free transport tubes (with the exception of the original device) are not acceptable. **This test is New York DOH approved.** **Days Performed: Sunday, Tuesday, Thursday, Saturday** **Reported:** 2–6 days	2/21/17
Chromium, Serum	CHRSER	89348	**Special Information:** Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician). **Unacceptable conditions: Separator tubes. Specimens that are not separated from the red cells or clot within 6 hours. This test is New York DOH approved.** **Clinical Information: Preferred test for evaluating metal ion release from metal-on-metal joint arthroplasty. May be useful in the assessment of deficiency or overload. For the assessment of hexavalent chromium exposure, chromium in blood or RBCs is preferred.** **Days Performed: Monday, Wednesday**–Saturday **Reported:** 2–5 days	2/21/17
Chromium, Urine	UCHRO	82495	**Special Information:** Diet, medication and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications (upon the advice of their physician). High concentrations of iodine may interfere with elemental testing. Abstinence from iodine-containing medications or contrast agents for at least 1 month prior to collecting specimens is recommended. ARUP studies indicate that refrigeration of urine alone, during and after collection, preserves specimens adequately, if tested within 14 days of collection. Urine collected within 48 hours after administration of a gadolinium (Gd) containing contrast media (may occur with MRI studies) and acid preserved samples are unacceptable. **Specimens contaminated with blood or fecal material are not acceptable. Specimens transported in non-trace element-free transport tubes (with the exception of the original device) are unacceptable.** Include total volume and collection interval with specimen. **This test is New York DOH approved.** **Clinical Information:** Chromium **urine levels may be used to monitor short term** exposure. **Days Performed: Monday, Wednesday,** Friday, **Saturday** **Reported:** 2–6 days	2/21/17
Cyanide, Blood	CYANID	82600	**Specimen Requirement:** 1 mL whole blood in a **potassium oxalate/ sodium fluoride (gray) tube;** Minimum: 0.5 mL; Refrigerated **Methodology:** Liquid Chromatography-**Tandem Mass Spectrometry (LC-MS/MS)**	Effective immediately
Cyclosporine	CYCLO	75666	**Stability:** Ambient: **24** hours Refrigerated: 7 days Frozen: **14 days**	2/15/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Cytology, SurePath Liquid-Based Pap Test	SPPAP		**Special Information: Transport cervical specimen in the original collection kit. For specific instructions regarding collection, contact Client Services at 800.628.6816 or 216.444.5755. Note: This test does not include HPV testing. The Pap test is a screening test for cervical cancer and its precursors with an inherent false-negative rate. Unacceptable conditions: Specimens not collected in a SurePath collection kit. Expired preservative vials or vials received without the collection devices.** **Specimen Requirement:** One PAP fluid in a SurePath collection device; Collect cervical specimen in a SurePath collection kit, **Rovers Cervex-Brush Kit (ARUP Supply #22216), PAP Perfect Plastic Spatula and Cytobrush Plus GT Collection Kit (ARUP Supply #41126), or Rovers Cervex-Brush Combi Collection Kit (ARUP Supply #45031) available through Client Services at 800.628.6816 or 216.444.5755;** Ambient **Days Performed: Sunday–Saturday** **Reported:** 2–15 days	2/21/17
Cytology, SurePath Liquid-Based Pap test and Human Papillomavirus (HPV), High Risk by PCR, SurePath (for routine co-testing in women over 30)	SPHPV		**Special Information: Transport cervical specimen in the original collection kit. For specific collection instructions, contact Client Services at 800.628.6816 or 216.444.5755. Note: If the SurePath Liquid-Based Pap Test is interpreted as Satisfactory, then Human Papillomavirus (HPV) High Risk by PCR, SurePath will be added. Additional charges apply. Unsatisfactory SurePath Liquid-Based Pap test specimens will not be tested for HPV. The Pap test is a screening test for cervical cancer and its precursors with an inherent false-negative rate. Unacceptable conditions: Specimens not collected in a SurePath collection kit. Expired preservative vials or vials received without the collection devices.** **Specimen Requirement:** One PAP fluid in a SurePath Collection Device; Cervical specimen in a SurePath collection kit, **Rovers Cervex-Brush Kit (ARUP Supply #22216), PAP Perfect Plastic Spatula and Cytobrush Plus GT Collection Kit (ARUP Supply #41126), or Rovers Cervex-Brush Combi Collection Kit (ARUP Supply #45031) available through Client Services at 800.628.6816 or 216.444.5755; Ambient**	2/21/17
Cytology, SurePath Liquid-Based Pap Test with Reflex to human Papillomavirus (HPV), High Risk by PCR, SurePath	SPLBP		**Special Information: Transport cervical specimen in the original collection kit. For specific collection instructions, contact Client Services at 800.628.6816 or 216.444.5755. If the SurePath Liquid-Based Pap Test is interpreted as atypical squamous cells of undetermined significance (ASC-US), then Human Papillomavirus (HPV) High Risk by PCR, SurePath will be added. Additional charges apply. Unacceptable conditions: Specimens not collected in a SurePath collection kit. Expired preservative vials or vials received without the collection devices.** **Specimen Requirement:** One PAP fluid in a SurePath Collection Device; Cervical specimen in a SurePath collection kit, **Rovers Cervex-Brush Kit (ARUP Supply #22216), PAP Perfect Plastic Spatula and Cytobrush Plus GT Collection Kit (ARUP Supply #41126), or Rovers Cervex-Brush Combi Collection Kit (ARUP Supply #45031) available through Client Services at 800.628.6816 or 216.444.5755;** Ambient	2/21/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
DNA Content, Cell Cycle Analysis, Ploidy and S-Phase	DNAMIS	88088	**Special Information: Provide the clinical information (pathology report) and specimen source. Unacceptable conditions: Products of Conception. No tumor tissue remaining on block. Specimens fixed in Bouin's solution (picric acid), mercuric chloride containing fixatives (e.g., B5, Zenker solution) or ethanol-based fixatives containing ethylene glycol, acetic acid, or zinc chloride. Clotted or hemolyzed blood or bone marrow. Decalcified specimens.** **Specimen Requirement:** Paraffin-embedded tissue in a clean container; Refrigerated *OR* 100 mL body fluid in a clean container; Minimum: **10 mL;** Must be received at Cleveland Clinic Laboratories by 3 p.m. EST on the day of collection; Refrigerated *OR* 2 mL bone marrow in a sodium or lithium heparin green top tube; Minimum: **1 mL; Note: Bone marrow specimens with low mononuclear cell counts may require more volume;** One Wright stained slide along with clinical information and specimen source must accompany specimen; Must be received at Cleveland Clinic Laboratories by 3 p.m. EST on the day of collection; Refrigerated *OR* 5 mL whole blood in a sodium or lithium heparin green top tube; Minimum: **1 mL;** One Wright stained slide along with clinical information and specimen source must accompany specimen; Must be received at Cleveland Clinic Laboratories by 3 p.m. EST on the day of collection; Refrigerated *OR* Cell pellet urine/bladder washings (unspecified) in RPMI media; Submit in Hanks Balanced Salt Solution or RPMI; MUST be received at Cleveland Clinic Laboratories by 3 p.m. EST on the day of collection; **One Wright stained slide along with clinical information and specimen source must accompany specimen;** Refrigerated	2/21/17
FISH for CCND1 (Paraffin)		88674	**CPT: 88377 x 1**	2/1/17
FK506	FK506	76553	**Stability:** Ambient: **24** hours Refrigerated: 7 days Frozen: **6** months	2/15/17
FSHD DNA Test	FSHDNA	82117	**Special Information:** Extracted DNA is not acceptable. **This assay requires intact WBC. Shipped at room temperature. Grossly hemolyzed specimens will be rejected. Informed consent required.** **Specimen Requirement: 10 mL** whole blood in an EDTA lavender top tube; Minimum: **7 mL;** Collect Monday–Wednesday only; Send to Cleveland Clinic Laboratories on the day of collection; Collect **3** EDTA lavender top tubes to ensure adequate specimen volume; Ambient **Stability:** Ambient: 72 hours Refrigerated: **Unacceptable** Frozen: Unacceptable	2/27/17
Gene Analysis 21 Hydroxylase	21GENE	88173	**Stability:** Ambient: 7–10 days; **Preferred receipt within 96 hours** Refrigerated: 7–10 days; **Preferred receipt within 96 hours** Frozen: Undetermined **Days Performed:** Monday **Reported: 13–22** days	Effective immediately

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Glucose, Fasting	GLF	77795	**Special Information: Patient should be fasting at least 8 hours prior to the test.** **Clinical Information:** Evaluation of glycemia. **American Diabetes Association guidelines state that a diabetes mellitus diagnosis is preliminarily made when the fasting plasma glucose meets or exceeds 126 mg/dL. In the absence of unequivocal hyperglycemia, results should be confirmed with repeat testing. Patients are at increased risk for diabetes mellitus (prediabetes) when the fasting glucose is 100 to 125 mg/dL.** **Specimen Requirement:** 1 mL plasma from a potassium oxalate/sodium fluoride (gray) tube; Minimum: 0.3 mL; **Aliquot into CCL aliquot tube; Centrifuge and refrigerate** **Stability:** Ambient: 24 hours Refrigerated: After removed from cells: 72 hours Frozen: **Unacceptable** **Reference Range:** Glucose, Fasting 0–99 Years: **74–99 mg/dL** Pre-Diabetes: 100–125 mg/dL Diabetes: > 125 mg/dL	3/21/17
Herpesvirus 6 PCR, Quant, CSF	HV6QNT	84312	**Test Name:** Previously Herpesvirus 6 PCR, Quant **Clinical Information:** Assay range: 81 copies/mL to 1 x 10(8) copies/mL. **HHV-6 reactivation can cause fever, rash, hepatitis, encephalitis, pneumonitis, and delay or suppression of bone marrow engraftment (HSCT) and/or increased risk of CMV infection (HSCT or SOT). Bone marrow suppression due to HHV-6 infection is often confused with rejection in an HSCT patient. Quantitative HHV-6 DNA PCR can be used for early detection of a primary infection, tracking the course of infection, and monitoring response to treatment; however, quantitative HHV-6 DNA PCR does not differentiate HHV-6 viremia from patients with chromosomally integrated HHV-6, a relatively uncommon congenital occurrence that has not been conclusively related to a disease state.** Detects both Type A and Type B in one assay. **The primers and probes used in this assay are specific for known strains of HHV-6 based on similarity search algorithms. Additionally,** no cross reactivity was detected when tested against adenoviruses, BKV, CMV, EBV, HSV-1, HSV-2, HHV-7, HHV-8, JCV, parvovirus B19, SV-40, and VZV. **Specimen Requirement:** 2 mL **cerebrospinal fluid (CSF)** in a sterile container; Minimum: 0.5 mL; Freeze **immediately; Deliver to Cleveland Clinic Laboratories within 24 hours of collection;** Specimen must be received by 12:00 noon EST on Fridays; **Ship on dry ice;** Frozen **Stability:** Ambient: Unacceptable Refrigerated: Unacceptable Frozen: 96 hours	2/3/17
Herpesvirus 7 PCR, Quant, CSF	HV7QNT	84311	**Test Name:** Previously Herpesvirus 7 PCR, Quant **Clinical Information:** Assay range: 112 copies/mL to 1 x 10(8) copies/mL. **HHV-7 is detectable in a variety of transplant settings, both HSCT and solid organ. Direct effects of HHV-7 include fever, rash, myelosuppression, encephalitis, and pneumonitis. Potentially more important are the indirect effects HHV-7 has on CMV disease, invasive fungal disease, and allograft dysfunction. Quantitative HHV-7 DNA PCR can be used to document the presence of the virus as well as track the course of infection.** *(continued on page 9)*	2/3/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Herpesvirus 7 PCR, Quant, CSF *(continued from page 8)*			**The primers and probes used in this assay are specific for known strains of HHV-7 based on similarity search algorithms. Additionally,** no cross reactivity was detected when tested against adenoviruses, BKV, CMV, EBV, HSV-1, HSV-2, HHV-6 variant A, HHV-6 variant B, HHV-8, JCV, parvovirus B19, SV-40, and VZV. **Specimen Requirement:** 2 mL **cerebrospinal fluid (CSF)** in a sterile container; Minimum: 0.5 mL; Freeze **immediately;** Deliver to Cleveland Clinic Laboratories within 24 hours of collection; **Specimen must be received by 12:00 noon EST on Fridays; Ship on dry ice;** Frozen **Stability:** Ambient: Unacceptable Refrigerated: Unacceptable Frozen: 96 hours	
Manganese, Serum	SMANG	89275	**Days Performed: Monday,** Wednesday, **Friday** **Reported:** 2–6 days	2/21/17
Measles IgG Antibody	MEASLG	75399	**Stability:** Ambient: **24** hours Refrigerated: 9 days Frozen: **14 days**	2/22/17
Mumps IgG Antibody	MUMPSG	75398	**Stability:** Ambient: **24** hours Refrigerated: 9 days Frozen: **14 days**	2/22/17
Mycoplasma pneumoniae IgG	MYCOG	50153	**Stability:** Ambient: **24** hours Refrigerated: **7** days Frozen: **14 days**	2/22/17
Mycoplasma pneumoniae IgM Antibody	MYCOPM	79586	**Stability:** Ambient: **24** hours Refrigerated: **7** days Frozen: **14 days**	2/22/17
NAbFeron Ab	NABFAB	81430	**Special Information:** Patient Prep: Collect specimens before interferon beta treatment, or more than 48 hours following the most recent dose. Patient should not be on steroid therapy in excess of 10 mg Prednisolone (or equivalent) daily. High endogenous levels of interferon beta, alpha or gamma may interfere with this assay. REFLEX TO TITER: If Interferon Beta Neutralizing Antibody screen result is positive, then Interferon Beta Neutralizing Antibody titer will be added at an additional cost. **Unacceptable conditions: Contaminated, hemolyzed, icteric or lipemic specimens. This test is New York DOH approved.** **Days Performed: Monday** **Reported:** 2–16 days	2/21/17
Nickel, Serum	NICKEL	87848	**Days Performed: Monday, Wednesday, Friday** **Reported:** 2–9 days	2/21/17
Prealbumin	PREALB	32108	**Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: **0.4 mL; Submit in original tube or aliquot into CCL aliquot tube; Centrifuge and refrigerate** **Stability:** Ambient: Unacceptable Refrigerated: **2** days Frozen: 6 months	3/12/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Pregnenolone	PREG	80398	**Special Information: CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Unacceptable conditions: Refrigerated or room temperature specimens. This test is New York DOH approved.** **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: 0.5 mL, **0.25 mL per aliquot tube; Separate** serum from cells ASAP **or within 2 hours of collection; Transfer 0.5 mL serum in two aliquot tubes** and freeze **immediately; Critical Frozen** *OR* 1 mL serum from a red top tube with no additive; Minimum: 0.5 mL, **0.25 mL per aliquot tube; Separate** serum from cells ASAP **or within 2 hours of collection; Transfer 0.5 mL serum in two aliquot tubes** and freeze **immediately; Critical Frozen** *OR* **1 mL plasma from an EDTA lavender top tube;** Minimum: 0.5 mL, **0.25 mL per aliquot tube; Separate plasma from cells ASAP or within 2 hours of collection; Transfer 0.5 mL plasma in two aliquot tubes and freeze immediately; Critical Frozen** *OR* **1 mL plasma from a sodium or lithium heparin green top tube;** Minimum: 0.5 mL, **0.25 mL per aliquot tube; Separate plasma from cells ASAP or within 2 hours of collection; Transfer 0.5 mL plasma in two aliquot tubes and freeze immediately; Critical Frozen** **Stability:** Ambient: **After separation from cells:** Unacceptable Refrigerated: **After separation from cells:** Unacceptable Frozen: **After separation from cells: 6 months** **Methodology: High Performance** Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) **Reference Range:** Male 6–12 Months: 13–327 ng/dL 13–23 Months: 12–171 ng/dL 2–4 Years: 10–125 ng/dL 5–6 Years: 10–156 ng/dL 7–9 Years: 13–205 ng/dL 10–12 Years: 15–151 ng/dL 13–15 Years: 18–197 ng/dL 16–17 Years: 17–228 ng/dL 18–99 Years: 23–173 ng/dL Tanner Stage I: 13–156 ng/dL Tanner Stage II: 12–143 ng/dL Tanner Stage III: 16–214 ng/dL Tanner Stage IV-V: 19–201 ng/dL Female 6–12 Months: 13–327 ng/dL 13–23 Months: 12–171 ng/dL 2–4 Years: 15–125 ng/dL 5–6 Years: 13–191 ng/dL 7–9 Years: 14–150 ng/dL 10–12 Years: 19–220 ng/dL 13–15 Years: 22–210 ng/dL 16–17 Years: 22–229 ng/dL 18–99 Years: 15–132 ng/dL Tanner Stage I: 15–171 ng/dL Tanner Stage II: 22–229 ng/dL Tanner Stage III: 34–215 ng/dL Tanner Stage IV-V: 26–**235 ng/dL** **Days Performed: Monday–Friday** **Reported: 2–5** days	3/29/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Purine and Pyrimidine Panel	UPURPY	82921	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** **Interpretation** Uracil **Thymine** **Adenine** Hypoxanthine Xanthine **Orotic** **Dihydroorotic Acid** Uric acid **Deoxythymidine** **Deoxyuridine** **Thymidine** **Uridine** **Deoxyadenosine** **Deoxyinosine** **Deoxyguanosine** **Adenosine** **Inosine** **Guanosine** **5-Aminoimidazole-4-carboxamide 1-beta-D-ribofuranoside (AICAR)** **Succinyladenosine** **Dihydrouracil** **Dihydrothymine** **N-carbamoyl-B-alanine** **N-carbamoyl-B-aminoisobutyric Acid** **Reviewed by** **Specimen Requirement:** 3 mL random urine in a clean container; Minimum: **2 mL;** Frozen **Stability:** Ambient: Unacceptable Refrigerated: Unacceptable Frozen: **90** days **Reference Range:** Uracil 0–**3** Years: ≤ **50 mmol/mol Cr** **4–6** Years: ≤ **30 mmol/mol Cr** **7–12** Years: ≤ **25 mmol/mol Cr** **13–18** Years: ≤ **20 mmol/mol Cr** 18–99 Years: ≤ **20 mmol/mol Cr** **Thymine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Adenine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** Hypoxanthine 0–**3** Years: ≤ **65 mmol/mol Cr** **4–6** Years: ≤ **30 mmol/mol Cr** **7–12** Years: ≤ **30 mmol/mol Cr** **13–18** Years: ≤ **30 mmol/mol Cr** 18–99 Years: ≤ **30 mmol/mol Cr** *(continued on page 12)*	2/9/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Purine and Pyrimidine Panel *(continued from page 11)*			Xanthine 0–**3** Years: **≤ 54 mmol/mol Cr** **4–6** Years: **≤ 21 mmol/mol Cr** **7–12** Years: **≤ 35 mmol/mol Cr** **13–18** Years: **≤ 15 mmol/mol Cr** 18–99 Years: **≤ 20 mmol/mol Cr** **Orotic** **0–3 Years: ≤ 4 mmol/mol Cr** **4–6 Years: ≤ 4 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 5 mmol/mol Cr** **Dihydroorotic Acid** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** Uric Acid 0–**3** Years: **350–2500 mmol/mol Cr** **4–6** Years: **200–2000 mmol/mol Cr** **7–12** Years: **200–1400 mmol/mol Cr** **13–18** Years: **150–700 mmol/mol Cr** 18–99 Years: **70–700 mmol/mol Cr** **Deoxythymidine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Deoxyuridine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Thymidine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Uridine** **0–3 Years: ≤ 10 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Deoxyadenosine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Deoxyinosine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** *(continued on page 13)*	

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Purine and Pyrimidine Panel *(continued from page 12)*			**Deoxyguanosine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Adenosine** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Inosine** **0–3 Years: ≤ 6 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Guanosine** **0–3 Years: ≤ 4 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **5-Aminoimidazole-4-carboxamide 1-beta-D-ribofuranoside (AICAR)** **0–3 Years: ≤ 3 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Succinyladenosine** **0–3 Years: ≤ 16 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Dihydrouracil** **0–3 Years: ≤ 15 mmol/mol Cr** **4–6 Years: ≤ 6 mmol/mol Cr** **7–12 Years: ≤ 6 mmol/mol Cr** **13–18 Years: ≤ 6 mmol/mol Cr** **18–99 Years: ≤ 6 mmol/mol Cr** **Dihydrothymine** **0–3 Years: ≤ 11 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **N-carbamoyl-B-alanine:** **0–3 Years: ≤ 30 mmol/mol Cr** **4–6 Years: ≤ 10 mmol/mol Cr** **7–12 Years: ≤ 10 mmol/mol Cr** **13–18 Years: ≤ 10 mmol/mol Cr** **18–99 Years: ≤ 10 mmol/mol Cr** **N-carbamoyl-B-aminoisobutyric Acid** **0–3 Years: ≤ 20 mmol/mol Cr** **4–6 Years: ≤ 3 mmol/mol Cr** **7–12 Years: ≤ 3 mmol/mol Cr** **13–18 Years: ≤ 3 mmol/mol Cr** **18–99 Years: ≤ 3 mmol/mol Cr** **Days Performed: Thursday** **Reported: 5–12** days	

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Rabies Antibody	RABIES	50154	**Special Information: Do not draw serum separator tubes.** **Clinical Information: In humans, a result of 0.5 IU/mL or higher is considered an acceptable response to rabies vaccination according to the World Health Organization (WHO) guidelines; see WHO and Advisory Committee on Immunization Practices documents for additional guidance. Also, there is more information at www.vet.ksu.edu/rabie.** **Specimen Requirement: 2 mL** serum from a **red top tube with no additive;** Minimum: **1 mL; Draw 2 tubes to ensure adequate specimen volume; Do not draw serum separator tubes; Transport using cold packs;** Refrigerated **Stability:** Ambient: **Unacceptable** Refrigerated: **10 days** Frozen: **30 days** **Methodology: Rapid Fluorescent Foci Inhibition Test (RFFIT)** **Reference Range: 0.1–15.0 IU/mL; Below detection limit < 0.1 IU/mL** **Days Performed: Monday, Wednesday, Thursday** **Reported: 3–4 weeks** **CPT: 86382 x 1**	2/21/17
Syphilis IgG (T pallidum)	SYPHG	84565	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** **Syphilis IgG. Qual** Syphilis IgG (T pallidum) **Special Information: Avoid multiple freeze-thaw cycles (3 is acceptable). Contaminated, icteric, lipemic, hemolyzed, or heat-inactivated sera may cause erroneous results and should be avoided.** **Clinical Limitation: Results obtained from immunocompromised individuals should be interpreted with caution. The syphilis IgG kit may be reactive with sera from patients with Yaws or Pinta.** **Clinical Information: The syphilis IgG kit is not, in and of itself, diagnostic for syphilis and should be considered in conjunction with other laboratory test results and the clinical presentation of the patient. Only a physician should interpret the results. A positive result is not useful for establishing a diagnosis of syphilis. In most situations, such a result may reflect prior treated infection. A non-reactive result does not totally exclude a recent (within the last 2-3 weeks) T pallidum infection. Therefore, results need to be interpreted with caution. Detection of treponemal antibodies may indicate recent, past or successfully treated syphilis infections and therefore cannot be used to differentiate between active and cured cases. A patient with a reactive result will usually remain reactive for life, and therefore, antibody indices cannot be used to determine responses to therapy.** **Stability:** Ambient: **1 day** Refrigerated: 7 days Frozen: **14 days** **Reference Range:** **Syphilis IgG. Qual: Non-reactive** Syphilis IgG (T pallidum): **Refer to report**	3/29/17

Test Changes (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Syphilis IgG with Confirmation	SYPHGX	84566	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** **Syphilis IgG. Qual** Syphilis IgG (T pallidum) **Stability:** Ambient: **1 day** Refrigerated: 7 days Frozen: **14 days** **Reference Range:** **Syphilis IgG. Qual: Non-reactive** Syphilis IgG (T pallidum): **Refer to report**	3/29/17
Thyroglobulin Antibody	TGAB	40033	**Stability:** Ambient: **24** hours Refrigerated: 7 days Frozen: **30 days**	2/15/17
Thyroid Peroxidase Antibody	MICRO	86377	**Stability:** Ambient: **24** hours Refrigerated: 7 days Frozen: 1 month	2/15/17
Varicella-Zoster IgG Ab	VZVG2	75622	**Stability:** Ambient: **24** hours Refrigerated: **7** days Frozen: **14 days**	2/22/17
Varicella Zoster IgG Ab, CSF	CVZVG	82818	**Special Information: Unacceptable conditions: Specimens other than CSF. Contaminated, heat-inactivated or hemolyzed specimens.**	2/21/17
Vitamin B1, Whole Blood	B1VIT		**Special Information: CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Unacceptable conditions: Any specimen other than whole blood. Plasma separator tubes. Glass tubes. Clotted or non-frozen specimens. This test is New York DOH approved.** **Clinical Information: Use for** nutritional **assessment of vitamin B1** (thiamine). Whole blood is the preferred specimen since approximately 80% of thiamine in whole blood is found in red blood cells. **Specimen Requirement:** 3 mL whole blood in a sodium or lithium heparin green top tube; Minimum: 0.6 mL; **Transfer 3 mL whole blood to an ARUP Standard Tube and freeze immediately; Critical Frozen** *OR* 3 mL whole blood in an EDTA lavender top tube; Minimum: 0.6 mL; **Transfer 3 mL whole blood to an ARUP Standard Tube and freeze immediately; Critical Frozen** **Days Performed:** Sunday–Saturday **Reported:** 3–**5** days	2/21/17

New Tests

Test Name	Order Code	Billing Code	Change	Effective Date
50 gram, non-fasting, 1-hour, gestational glucose screen	GLTGST		**Special Information:** Patient does not need to fast. Administer 50 gm of Dextrose within 5 minutes. Collect 1 hour post administration. **Clinical Information:** Screening for Gestational Diabetes Mellitus. American Congress of Obstetricians and Gynecologists (Carpenter/Coustan) guidelines state a gestational diabetes mellitus positive screen is made, in women not previously diagnosed with overt diabetes, when the 1 hour plasma glucose level is equal to or above 140 mg/dL. The Cleveland Clinic Ob/Gyn and Women's Health Institute recommends a 135 mg/dL cut-off. **Specimen Requirement:** 1 mL plasma from a potassium oxalate/sodium fluoride (gray) tube; Minimum: 0.3 mL; Aliquot into CCL aliquot tube; Centrifuge and refrigerate **Stability:** Ambient: 24 hours Refrigerated: After removed from cells: 72 hours Frozen: Unacceptable **Methodology:** Glucose Hexokinase **Reference Range:** Glucose Screen, Pregnancy: < 135 mg/dL **Days Performed:** Sunday–Saturday **Reported:** 8 hours **CPT:** 82950 x 1 **Price:** $18.00	3/21/17
75 gram, fasting, 2-hour, non-gestational glucose tolerance	GTNG2		**Includes:** Fasting 1 Hour 2 Hour **Special Information:** Patient should be fasting at least 8 hours prior to the test. Collect a fasting specimen, then administer 75 gm of Dextrose within 5 minutes. Collect specimens at 1 and 2 hours post glucose load. Indicate collection time on each specimen. **Clinical Information:** Confirmation of diabetes mellitus. ADA guidelines state a diabetes mellitus diagnosis is preliminarily made when the fasting plasma glucose meets or exceeds 126 mg/dL and/or the 2 hour glucose tolerance meets or exceeds 200 mg/dL. In the absence of unequivocal hyperglycemia, results should be confirmed with repeat testing. Patients are at increased risk for diabetes mellitus (prediabetes) when the fasting glucose is 100 to 125 mg/dL or the 2 hour glucose tolerance glucose result is 140 to 199 mg/dL. A diagnostic cutoff for the 1 hour time point is not established and should be clinically determined. **Specimen Requirement:** 1 mL plasma from a potassium oxalate/sodium fluoride (gray) tube; Minimum: 0.3 mL; Aliquot into CCL aliquot tube; Centrifuge and refrigerate **Stability:** Ambient: 24 hours Refrigerated: After removed from cells: 72 hours Frozen: Unacceptable **Methodology:** Glucose Hexokinase **Reference Range:** Fasting: 74–99 mg/dL 1 Hour: See comment 2 Hour: < 140 mg/dL **Days Performed:** Sunday–Saturday **Reported:** 8 hours **CPT:** 82951 x 1 **Price:** $49.00	3/21/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
75 gram, fasting, 5-hour, non-gestational glucose tolerance	GTNG5		**Includes:** Fasting 1 Hour 2 Hour 3 Hour 4 Hour 5 Hour **Special Information:** Patient should be fasting at least 8 hours prior to the test. Collect a fasting specimen, then administer 75 gm of Dextrose within 5 minutes. Collect specimens at 1, 2, 3, 4 and 5 hours post glucose load. Indicate collection time on each specimen. **Clinical Information:** Evaluation of disorders of glucose metabolism. American Diabetes Association guidelines state a diabetes mellitus diagnosis is preliminarily made when the fasting plasma glucose meets or exceeds 126 mg/dL and/or the 2 hour glucose tolerance meets or exceeds 200 mg/dL. In the absence of unequivocal hyperglycemia, results should be confirmed with repeat testing. Patients are at increased risk for diabetes mellitus (prediabetes) when the fasting glucose is 100 to 125 mg/dL or the 2 hour glucose tolerance result is 140 to 199 mg/dL. Diagnostic cutoffs for the other time points are not established and should be clinically determined. **Specimen Requirement:** 1 mL plasma from a potassium oxalate/sodium fluoride (gray) tube; Minimum: 0.3 mL; Aliquot into CCL aliquot tube; Centrifuge and refrigerate **Stability:** Ambient: 24 hours Refrigerated: After removed from cells: 72 hours Frozen: Unacceptable **Methodology:** Glucose Hexokinase **Reference Range:** Fasting: 74–99 mg/dL 1 Hour: See comment 2 Hour: < 140 mg/dL 3 Hour: See comment 4 Hour: See comment 5 Hour: See comment **Days Performed:** Sunday–Saturday **Reported:** 8 hours **CPT:** 82951 x 1, 82952 x 3 **Price:** $60.00	3/21/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
100 gram, fasting, 3-hour gestational glucose tolerance confirmation	GTGST3		**Includes:** Glucose GST, Fasting Glucose GST, 1 Hr Glucose GST, 2 Hr Glucose GST, 3 Hr **Special Information:** Patient should be fasting at least 8 hours prior to test. Collect a fasting specimen, then administer 100 gm of Dextrose within 5 minutes. Collect specimens at 1, 2 and 3 hours post glucose load. Indicate collection time on each specimen. **Clinical Information:** Confirmation of Gestational Diabetes Mellitus. American Congress of Obstetricians and Gynecologists (Carpenter/ Coustan) guidelines state gestational diabetes mellitus is present when 2 or more of the plasma glucose concentrations meet or exceed the following levels: fasting: 95 mg/dL; 1 hr: 180 mg/dL; 2 hr: 155 mg/dL; and 3 hr: 140 mg/dL. **Specimen Requirement:** 1 mL plasma from a potassium oxalate/ sodium fluoride (gray) tube; Minimum: 0.3 mL; Aliquot into CCL aliquot tube; Centrifuge and refrigerate **Stability:** Ambient: 24 hours Refrigerated: After removed from cells: 72 hours Frozen: Unacceptable **Methodology:** Glucose Hexokinase **Reference Range:** Glucose GST, Fasting: < 95 mg/dL Glucose GST, 1 Hr: < 180 mg/dL Glucose GST, 2 Hr: < 155 mg/dL Glucose GST, 3 Hr: < 140 mg/dL **Days Performed:** Sunday–Saturday **Reported:** 8 hours **CPT:** 82951 x 1, 82952 x 1 **Price:** $60.00	3/21/17
FISH for Trisomy 4 and 10	FHT410		**Specimen Requirement:** 2–3 mL bone marrow in a sodium heparin green top tube; If aliquoting is necessary, sterile aliquot tubes must be used; Ambient *OR* 2 -3 mL bone marrow in an EDTA lavender top tube; If aliquoting is necessary, sterile aliquot tubes must be used; Ambient *OR* 5–7 mL whole blood in a sodium heparin green top tube; If aliquoting is necessary, sterile aliquot tubes must be used; Ambient *OR* 5–7 mL whole blood in an EDTA lavender top tube; If aliquoting is necessary, sterile aliquot tubes must be used; Ambient **Stability:** Ambient: 48 hours Refrigerated: Not preferred Frozen: Unacceptable **Methodology:** Fluorescent In-Situ Hybridization (FISH) **Days Performed:** 3 days per week **CPT:** 88271 x 2, 88275 x 1, 88291 x 1	4/11/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Helicobacter pylori Antigen by EIA, Stool	HPYLAG		**Special Information:** Avoid ingestion of antimicrobials, proton pump inhibitors and bismuth within 14 days of specimen collection. They may cause false negative results. **Clinical Information:** H pylori is a recognized cause of duodenal ulcer, dyspepsia and chronic active gastritis. This test is used as an aid in the diagnosis of H pylori infection. For adults < 55 years of age, the H pylori antigen assay should be used in conjunction with other noninvasive tests such as the H pylori Breath test for diagnosis of infection. In older adults (> 55 years) or those with alarm symptoms, invasive tests such as endoscopy with biopsy may prove helpful for diagnosis. Culture and histology are orderable options. Serological testing is not recommended. The antigen test can also be used to monitor treatment following antibiotics. **Specimen Requirement:** 1 g stool in a clean container (No preservatives); Non-preserved stool is the only acceptable specimen; Both solid and liquid stools can be tested; Transport promptly to Cleveland Clinic Laboratories; Refrigerated transport is preferred; Alternatively stool can be frozen if delays in transport are anticipated; Refrigerated **Stability:** Ambient: 8 hours Refrigerated: 72 hours Frozen: 2 months **Methodology:** Enzyme Immunoassay (EIA) **Days Performed:** Monday–Friday **Reported:** 1–4 days **CPT:** 87338 x 1	3/28/17
Herpesvirus 6 PCR, Quant, Plasma	HV6PLS		**Clinical Information:** Assay range: 188 copies/mL to 1 x 10(8) copies/mL. HHV-6 reactivation can cause fever, rash, hepatitis, encephalitis, pneumonitis, and delay or suppression of bone marrow engraftment (HSCT) and/or increased risk of CMV infection (HSCT or SOT). Bone marrow suppression due to HHV-6 infection is often confused with rejection in an HSCT patient. Quantitative HHV-6 DNA PCR can be used for early detection of a primary infection, tracking the course of infection, and monitoring response to treatment; however, quantitative HHV-6 DNA PCR does not differentiate HHV-6 viremia from patients with chromosomally integrated HHV-6, a relatively uncommon congenital occurrence that has not been conclusively related to a disease state. Detects both Type A and Type B in one assay. The primers and probes used in this assay are specific for known strains of HHV-6 based on similarity search algorithms. Additionally, no cross reactivity was detected when tested against adenoviruses, BKV, CMV, EBV, HSV-1, HSV-2, HHV-7, HHV-8, JCV, parvovirus B19, SV-40, and VZV. **Specimen Requirement:** 2 mL plasma from an EDTA lavender top tube; Minimum: 0.5 mL; Collect 4-5 mL whole blood; Centrifuge and transfer 2 mL plasma to sterile, screw top tube; Deliver to Cleveland Clinic Laboratories within 24 hours of collection; Specimen must be received by 12:00 noon EST on Fridays; Frozen *OR* 2 mL plasma from an ACD A or B (yellow) tube; Minimum: 0.5 mL; Collect 4-5 mL whole blood; Centrifuge and transfer 2 mL plasma to sterile, screw top tube; Deliver to Cleveland Clinic Laboratories within 24 hours of collection; Specimen must be received by 12:00 noon EST on Fridays; Frozen **Stability:** Ambient: 96 hours Refrigerated: Unacceptable Frozen: 96 hours **Methodology:** Polymerase Chain Reaction (PCR) **Reference Range:** Not detected **Days Performed:** Monday–Saturday **Reported:** 2–3 days **CPT:** 87533 x 1 **Price:** $335.00	2/3/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Methaqualone, GC/MS, Urine	UMETHA		**Clinical Information:** Methaqualone was formerly marketed as a sedative and hypnotic; however, there is no prescribed dosage form currently available. Abuse potential exists due to euphoric properties. **Specimen Requirement:** 30 mL random urine in a clean container; Minimum: 1.5 mL; Refrigerated **Stability:** Ambient: 5 days Refrigerated: 21 days Frozen: 1 year **Methodology:** Gas Chromatography Mass Spectrometry (GCMS) **Reference Range:** None detected **Days Performed:** Wednesday **Reported:** 4–10 days **CPT:** 80368 x 1, (G0480, if appropriate) **Price:** $121.00	2/9/17
Peanut Component Panel	PNUTCP		**Includes:** Ara h 2 (f423) Ara h 1 (f422) Ara h 3 (f424) Ara h 9 (f427) Ara h 8 (f352) **Clinical Information:** The ImmunoCAP® Peanut Component Allergen Test helps to assess a patient's level of risk of a life-threatening reaction, and may reassure patients when the risk for allergic symptoms is low or when they will most likely experience mild or localized reactions upon exposure to peanut. The test helps the health care provider identify primary, species-specific allergic sensitization, differentiate between symptoms caused by a primary allergen source and those caused by cross-reactivity, assess the level of risk for life-threatening allergic reactions, and provide clarity regarding the patient's risk of an allergic reaction to ease fears and help target effective management. **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: 0.6 mL; Ambient *OR* 1 mL serum from a red top tube with no additive; Minimum: 0.6 mL; Ambient **Stability:** Ambient: 14 days Refrigerated: 14 days Frozen: 30 days **Methodology:** Immunoassay (IA) **Reference Range:** Ara h 2 (f423): < 0.10 kU/L Ara h 1 (f422): < 0.10 kU/L Ara h 3 (f424): < 0.10 kU/L Ara h 9 (f427): < 0.10 kU/L Ara h 8 (f352): < 0.10 kU/L **Days Performed:** Monday–Friday **Reported:** 5–6 days **CPT:** 86003 x 5 **Price:** $125.00 (non-discountable)	2/2/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Staph aureus PCR	SAPCR		**Includes:** MRSA PCR Staph aureus PCR **Special Information:** This test will be performed on nasal swabs collected in Amies or Stuart's transport media. Unacceptable specimens include: Wooden swabs, wire swabs, gel swabs, dry swabs, charcoal swabs, calcium alginate swabs, and swabs collected in transport media other than Amies or Stuart's. Unacceptable specimens will be rejected for the assay. Acceptable specimens should be kept at room temperature (15-28 °C) if they will be processed within 24 hours; otherwise store at 2-8 °C. Stability of the swab specimen is 5 days when stored at 2-8 °C. **Clinical Information:** This test detects Staphylococcus aureus (SA) and methicillin-resistant Staphylococcus aureus (MRSA) from nasal swabs to determine the Staph aureus carrier status of patients prior to surgery. Testing is performed 7 days per week, 24 hours per day. TAT for this assay in most cases is expected to be 4-6 hours after receipt in Microbiology. The test is intended to aid in the prevention and control of MRSA/SA infections in healthcare settings. The Staph aureus PCR test is not intended to diagnose, guide or monitor treatment for MRSA/SA infections, or provide results of susceptibility to methicillin. A negative result does not preclude MRSA/SA nasal colonization. Concomitant cultures are necessary to recover organisms for epidemiological typing or for further susceptibility testing. **Specimen Requirement:** One nasal swab in Amies or Stuart's media without charcoal; Collect specimen with dual swab: BBL Culture swab in liquid Stuart's medium or Copan swab in liquid Aimes medium; Both swabs are made by Copan; Swabs in gel or other transport medium, dry swabs, and swabs with wooden shaft will be rejected; Refrigerated **Stability:** Ambient: 24 hours Refrigerated: 5 days Frozen: Unacceptable; Will be rejected **Methodology:** Reverse Transcription/Polymerase Chain Reaction (RT/PCR) **Reference Range:** MRSA PCR: MRSA Not Detected Staph aureus PCR: Staph aureus Not Detected **Days Performed:** Sunday–Saturday **Reported:** 1 day **CPT:** 87640 x 1, 87641 x 1 **Price:** $153.00	2/1/17
TPMT Genotyping Assay	TPMTGN		*This test was previously announced in the January 2017 Technical Update.* **Price:** $490.00	2/28/17

New Tests (Cont.)

Test Name	Order Code	Billing Code	Change	Effective Date
Treponema Pallidum IgG	TPAG		**Includes:** T. pallidum, IgG Qual T. pallidum, IgG **Special Information:** Do not use heat inactivated samples. Do not use hyperlipemic, hemolytic, or contaminated samples. Avoid repeated freezing and thawing. **Clinical Limitation:** The TREP-SURE EIA test is specific for detecting Treponema pallidum antibodies in serum or plasma samples. It does not detect T pallidum directly. **Clinical Information:** A negative result indicates that no, or very low levels of antibody are present in the sample, but does not rule out a recent or current infection. A positive result indicates that antibody is present in the sample as a result of previous or present infection with T pallidum. The magnitude of the measured result above the cut-off is not indicative of the total amount of antibody present. Patients with equivocal results should be considered suspect for infection with T pallidum since a low level of antibody is detected. A second sample should be collected 2 to 4 weeks later and tested. An equivocal result indicates that a low level of antibody is detected, and the patient should be monitored for antibody status. The values obtained from this assay are intended to aid in diagnosis only. As with all serological tests for syphilis, interpretation of results obtained with the TREP-SURE Syphilis Antibody test must be used in conjunction with the patient's clinical symptoms, medical history and other clinical and/or laboratory findings to produce an overall clinical diagnosis. All treponemal tests tend to remain reactive following treponemal infection; therefore, they should not be used to evaluate response to therapy. Because of the persistence of reactivity, probably for the life of the patient, the treponemal tests are of no value to the clinician in determining relapse or re-infection in a patient who has had a reactive result. **Specimen Requirement:** 2 mL serum from a serum separator (gold) tube; Minimum: 0.5 mL; Refrigerated **Stability:** Ambient: 1 day Refrigerated: 7 days Frozen: 14 days **Methodology:** Enzyme Immunoassay (EIA) **Reference Range:** T. pallidum, IgG Qual: Negative T. pallidum, IgG: Refer to report **Days Performed:** Tuesday, Friday **Reported:** 1–5 days **CPT:** 86780 x 1 **Price:** $56.00	3/29/17

Fee Increases

Test Name	Order Code	Billing Code	List Fee	CPT Code	Effective Date
Purine and Pyrimidine Panel	UPURPY	82921	$550.00	82542	2/9/17

Discontinued Tests

Test Name	Order Code	Billing Code	Test Information	Effective Date
FISH for Trisomy 4,10 and 17	COGFSH	84172	This test will no longer be available. Suggest ordering FISH for Trisomy 4 and 10 (FHT410).	4/11/17
Gluc/Insulin Tolerance Panel	GLINSP	82111	This test will no longer be available.	3/21/17
Glucose, 2hr Postprandial	G2PP	82210	This test will no longer be available.	3/21/17
Glucose Screen, Pregnancy	GLUP	79121	This test will no longer be available. Suggest ordering 50 gram, non-fasting, 1-hour, gestational glucose screen (GLTGST).	3/21/17
Glucose Tolerance, Five-Hour	GTT5	172	This test will no longer be available. Suggest ordering 75 gram, fasting, 5-hour, non-gestational glucose tolerance (GTNG5).	3/21/17
Glucose Tolerance, Four-Hour	GTT4	171	This test will no longer be available.	3/21/17
Glucose Tolerance, GEST	GTGST	84445	This test will no longer be available. Suggest ordering 100 gram, fasting, 3-hour gestational glucose tolerance confirmation (GTGST3).	3/21/17
Glucose Tolerance, Three-Hour	GTT3	169	This test will no longer be available.	3/21/17
Glucose Tolerance, Two-Hour	GTT2	168	This test will no longer be available. Suggest ordering 75 gram, fasting, 2-hour, non-gestational glucose tolerance (GTNG2).	3/21/17
Helicobacter pylori Antigen, Stool	SHPYLR	82624	This test will no longer be available. Suggest ordering Helicobacter pylori Antigen by EIA, Stool (HPYLAG).	3/28/17
Treponema Pallidum Antibody, IgG	FTAABS	86650	This test will no longer be available. Suggest ordering Treponema Pallidum IgG (TPAG).	3/29/17