Cleveland Clinic

Cleveland Clinic Laboratories

Technical Update • January 2018

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 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	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
4	Allergen, Food, Peanut Components IgE												■	
4	Alpha-1-Antitrypsin Clearance, Timed		■											
4	Alpha-1-Antitrypsin Phenotype by Electrophoresis					■	■		■	■	■	■		
4	Alpha-1-Antitrypsin, Random Stool		■			■	■		■	■	■	■		
4–5	Aminolevulinic Acid Dehydratase (ALAD), Whole Blood					■	■		■	■	■			
19	Antidepressant Drug Screen Quant., Urine				■									
15	Antidepressant Panel Quantitative, Urine			■										
15	Aquaporin-4 Receptor Antibody, IgG by IFA, CSF with Reflex to Titer			■										
5	Bartonella PCR					■	■		■		■	■	■	
5–6	C Telopeptide, Beta Cross Linked					■	■			■	■	■		
6–7	Dihydrotestosterone					■	■		■	■	■	■	■	
19	Estrogen, Total				■									
7	FISH Insight Analysis					■								
19	Fungal Antibodies by CF, CSF				■									
16	Fungal Antibodies with Reflex to Blastomyces dermatitidis Antibodies by Immunodiffusion, CSF			■										
7	GAD65 Antibody, CSF					■	■					■		
7	Glucagon					■	■		■	■	■	■		
8	Granulocyte Antibodies					■	■		■	■	■	■		
8	HCG, Qualitative, Urine												■	
8–9	Hemoglobin A1C					■			■			■		
9	Herpes Simplex Virus by PCR, CSF							■						

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
19	Herpesvirus 6 IgM Antibodies, CSF				■									
9	Hyperoxaluria, Urine					■			■	■				
10	IBD Serology Disease Panel					■	■	■	■	■	■	■	■	
19	IDH1/IDH2 Mutation, FFPE Tissue				■									
19	Iodine, Random Urine				■									
16–17	Iodine, Urine			■										
19	Iodine, Urine 24 hours				■									
10	LC-MS/MS Thyroglobulin measurement for Thyroglobulin Antibody Interference					■	■			■	■	■		
11	Lipid Panel, Basic					■								
17	Lipid Panel, Nonfasting			■										
19	Neuromyelitis Optica (NMO)/Aquaporin-4-IgG FACS Assay, CSF				■									
11	Osteocalcin					■	■			■	■			
11	PAI-1 Genotype 5G/4G					■	■	■	■		■	■		
19	Pancreatic Polypeptide				■									
18	Pancreatic Polypeptide by Quantitative Radioimmunoassay			■										
18	Pathology Consultation Comprehensive Report			■										
12	Platelet Dependent Antibody, Unfractionated Heparin					■	■	■		■	■	■		
19	PRO-PredictR Metabolites				■									
12	PTH, Intact					■								
19	Respiratory Culture, Special				■									
12–13	Rickettsia rickettsii IgG & IgM Abs					■	■		■	■	■	■		
13	Rufinamide					■	■		■	■	■	■		
13–14	T3 Uptake					■	■			■	■	■		
18	Thiopurine Metabolites by LC-MS/MS			■										
14	Tobramycin, Post Dose					■								
14	Tobramycin, Pre Dose					■								
14	Tobramycin, Random					■								
14	Vitamin B12									■		■		
14	Voltage-Gated Calcium Channel IgG Autoantibodies					■	■		■	■	■	■		
14	ZAP-70 Analysis by Flow Cytometry					■	■							

Dear Valued Client,

For several chemistry tests, additional information regarding sample collection will be added on 1/15/18: "Samples should not be taken from patients receiving therapy with high biotin doses (i.e., > 5 mg/day) until at least 8 hours following the most recent biotin administration." Please refer to the Special Information field of each test in the Test Directory for test-specific details. The following tests are affected:

- Beta HCG, Quantitative, Blood (HCGQT)
- Bioavailable Testosterone, SHBG, Adult Male (BTESTO)
- CA 125 (CA125)
- CA 15-3 (CA153)
- CKMB (MBE)
- CK, Total and CKMB (CKCKMB)
- DHEA-S (DHEAS)
- Estradiol-17 B (E2)
- Ferritin (FERR)
- Folate, Serum (SERFOL)
- FSH (FSH)
- FSH with Tanner Stages (FSHTAN)
- LH (LH)
- LH, Pediatric (LHPED)
- LH with Tanner Stages (LHTAN)
- Luteinizing Hormone/Follicle Stimulating Hormone (XLHFSH)
- Myoglobin, Serum (MYOGLB)
- NT Pro BNP (NTBNP)
- Procalcitonin (PROCAL)
- Progesterone (PROG)
- Prolactin (PROL)
- PSA (PSA)
- PSA, Free (PSATF)
- PSA, Screening (PSAS1)
- Sex Hormone Binding Globulin (SHBG2)
- T3 (T3)
- T3, Free (FREET3)
- T4 (T4)
- T4, Free (FT4)
- T4/FTI (T4FTI)
- Testosterone (TESTO)
- Testosterone, Free and Total (FTESTO)
- Troponin T (TNT)
- TSH (TSH)
- Vitamin B12 & Folate (XB12F)

Test Changes

Test Name	Order Code	Change	Effective Date
Allergen, Food, Peanut Components IgE	PNUTCP	**CPT:** 86003 **x 1, 86008 x 5**	1/25/18
Alpha-1-Antitrypsin Clearance, Timed	A1ACL	**Test Name:** Previously Alpha-1-Antitrypsin Clearance	3/13/18
Alpha-1-Antitrypsin Phenotype by Electrophoresis	A1APHE	**Special Information: This test is New York DOH approved.** **Clinical Information: Use to determine specific AAT protein variant(s) in individual with decreased concentration of AAT (< 90 mg/dL). Interpret with caution if the patient has been transfused within the previous 21 days.** **Specimen Requirement: 1 mL** serum from a plain no additive (red) tube; Minimum: **0.3 mL; Transfer 1 mL serum to standard aliquot tube;** Refrigerated *OR* **1 mL** serum from a serum separator (gold) tube; Minimum: **0.3 mL; Transfer 1 mL serum to standard aliquot tube;** Refrigerated **Stability:** Ambient: **After separation from cells: 1 week** Refrigerated: **After separation from cells: 3 months** Frozen: **After separation from cells: 3 months (Avoid repeated freeze/thaw cycles)** **Methodology:** Isoelectric Focusing **Immunoturbidimetric Assay** **Reference Range:** Alpha1 Antitry Serum: **90–200 mg/dL** Alpha1 Antitry Pheno: Refer to report **Days Performed: Sunday–Saturday** **Reported:** 3–**5** days	3/8/18
Alpha-1-Antitrypsin, Random Stool	STA1A	**Test Name:** Previously Alpha-1-Antitrypsin Stool **Special Information:** For timed (24-hour) stools, please order Alpha-1 Antitrypsin Clearance, **Timed. Specimens in media or preservatives are unacceptable. This test is New York DOH approved.** **Specimen Requirement:** 5 g random stool in a clean container **(No preservatives);** Minimum: **1 g;** Frozen **Stability:** Ambient: **24 hours** Refrigerated: **7 days** Frozen: **3 months** **Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)** **Reference Range: 0.00–0.50 mg/g** **Days Performed:** Monday, **Wednesday, Friday** **Reported:** 2–**4** days	3/13/18
Aminolevulinic Acid Dehydratase (ALAD), Whole Blood	ALADWB	**Special Information: Patient Prep:** Patient should abstain from alcohol for 24 hours prior to collection. **Include a list of medications the patient is currently taking. After collection, immediately place specimen in an ice bath. Grossly hemolyzed specimens are unacceptable. This test is New York DOH approved.** **Clinical Information: Confirmation of a diagnosis of aminolevulinic acid dehydratase deficiency porphyria (ADP), an extremely rare porphyria.** **Specimen Requirement: 5 mL** whole blood in a sodium heparin (green) tube; Minimum: 3 mL; Place specimen on ice after draw; Patient should abstain from alcohol for 24 hours; Include a list of medications the patient is currently taking; Send specimen to Cleveland Clinic Laboratories on the day of collection; **Transport 5 mL whole blood in original tube;** Refrigerated *OR* **5 mL** whole blood in an EDTA (lavender) tube; Minimum: 3 mL; Place specimen on ice after draw; Patient should abstain from alcohol for 24 hours; Include a list of medications the patient is currently taking; Send specimen to Cleveland Clinic Laboratories on the day of collection; **Transport 5 mL whole blood in original tube;** Refrigerated *(continued on page 5)*	3/20/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Aminolevulinic Acid Dehydratase (ALAD), Whole Blood *(continued from page 4)*		*OR* **5 mL** whole blood in a lithium heparin (green) tube; Minimum: 3 mL; Place specimen on ice after draw; Patient should abstain from alcohol for 24 hours; Include a list of medications the patient is currently taking; Send specimen to Cleveland Clinic Laboratories on the day of collection; **Transport 5 mL whole blood in original tube;** Refrigerated **Methodology:** **Quantitative** Enzymatic Spectrofluorometric **Reference Range: Refer to report** **Days Performed: Varies** **Reported:** 4–**11** days	
Bartonella PCR	BARPCR	**Special Information: Specimen source is required. This test is New York DOH approved.** **Clinical Information: Useful to detect Bartonella species in blood, cerebrospinal fluid (CSF), or tissue.** **Specimen Requirement:** 1 mL **plasma** from an EDTA (lavender) tube; Minimum: 0.5 mL; **Separate plasma from cells and transfer to sterile aliquot tube; Specimen source required; Frozen** *OR* 1 mL **serum from a serum separator (gold) tube;** Minimum: 0.5 mL; **Separate serum from cells and transfer to sterile aliquot tube; Specimen source required; Frozen** *OR* 1 mL whole blood from an EDTA (lavender) tube; Minimum: 0.5 mL; **Transfer 1 mL whole blood to sterile aliquot tube; Specimen source required;** Refrigerated *OR* 1 mL **cerebrospinal fluid (CSF) in a sterile container;** Minimum: 0.5 mL; **Specimen source required; Frozen** *OR* **Tissue (unspecified) in a sterile container; Transfer tissue to a sterile container and freeze immediately; Specimen source required; Frozen** **Stability:** Ambient: **Serum, plasma, CSF: 24 hours; Whole blood:** 7 days; **Tissue: Unacceptable** Refrigerated: **Serum, plasma, CSF: 5 days; Whole blood:** 7 days; **Tissue: Unacceptable** Frozen: **Serum, plasma, CSF, tissue: 1 month; Whole blood:** 7 days **Methodology: Qualitative** Polymerase Chain Reaction **Days Performed: Tuesday,** Friday **Reported: 2–6** days **CPT: 87471 x 1**	3/22/18
C Telopeptide, Beta Cross Linked	CTELO	**Special Information: Patient Prep: For patients receiving therapy with high biotin doses (e.g., greater than 5 mg/day), specimen should not be drawn until at least 8 hours after the last biotin administration.** Hemolyzed specimens are unacceptable. **This test is New York DOH approved.** **Clinical Information: Preferred test to measure bone resorption and** monitor response to antiresorptive therapy (e.g., bisphosphonates, hormone replacement therapy) in postmenopausal women and individuals with **osteoporosis.** **Specimen Requirement:** 1 mL serum from a **serum separator (gold) tube;** Minimum: **0.5 mL; Patient Prep: For patients receiving therapy with high biotin doses (e.g., greater than 5 mg/day), specimen should not be drawn until at least 8 hours after the last biotin administration; Allow tube to sit for 15–20 minutes at room temperature to form clot;** Centrifuge and **separate serum from cells ASAP or within 2 hours of collection;** Transfer serum to standard aliquot tube; Frozen *OR* 1 mL **plasma from a lithium heparin (green) tube;** Minimum: **0.5 mL; Patient Prep: For patients receiving therapy with high biotin doses (e.g., greater than 5 mg/day), specimen should not be drawn until at least 8 hours after the last biotin administration; Allow tube to sit for 15–20 minutes at room temperature to form clot;** Centrifuge and **separate plasma from cells ASAP or within 2 hours of collection;** Transfer **plasma** to standard aliquot tube; Frozen *(continued on page 6)*	3/20/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
C Telopeptide, Beta Cross Linked *(continued from page 5)*		**Stability:** Ambient: **After separation from cells: 4 hours** Refrigerated: **After separation from cells: 8** hours Frozen: **After separation from cells: 3 months** **Reference Range:** Female **6 Months–6 Years: 500–1800 pg/mL** **7–9 Years: 566–1690 pg/mL** **10–12 Years: 503–2077 pg/mL** **13–15 Years: 160–1590 pg/mL** **16–17 Years: 167- 933 pg/mL** **18–29 Years: 64–640 pg/mL** **30–39 Years: 60–650 pg/mL** **40–49 Years: 40–465 pg/mL** Postmenopausal: 104–1008 pg/mL Male **6 Months–6 Years: 500–1700 pg/mL** **7–9 Years: 522–1682 pg/mL** **10–12 Years: 553–2071 pg/mL** **13–15 Years: 485–2468 pg/mL** **16–17 Years: 276–1546 pg/mL** **18–29 Years: 87–1200 pg/mL** **30–39 Years: 70–780 pg/mL** **40–49 Years: 60–700 pg/mL** **50–69 Years: 40–840 pg/mL** **70–99 Years: 52–847 pg/mL** **Days Performed: Tuesday, Thursday,** Saturday **Reported:** 2–**5** days	
Dihydrotestosterone	DHT	**Special Information: Hemolyzed or lipemic specimens are unacceptable. This test is New York DOH approved.** **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: 0.6 mL; **Separate serum from cells ASAP or within 2 hours of collection; Transfer to standard aliquot tube and freeze immediately; Frozen** *OR* 1 mL serum from a plain no additive (red) tube; Minimum: 0.6 mL; **Separate serum from cells ASAP or within 2 hours of collection; Transfer to standard aliquot tube and freeze immediately; Frozen** **Stability:** Ambient: **After separation from cells: 48 hours** Refrigerated: **After separation from cells: 5** days Frozen: **After separation from cells: 6 months** **Methodology: High Performance** Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) **Reference Range:** Male **Premature: 100.0–530.0 pg/mL** **Full Term: 50.0–600.0 pg/mL** **1 Week–6 Months: 120.0–850.0 pg/mL** **7 Months–9 Years: 0.0–49.9 pg/mL** **10–19 Years: 0.0–533.0 pg/mL** **20 Years and older: 106.0–719.0 pg/mL** **Tanner Stage I: 1.0–47.6 pg/mL** **Tanner Stage II: 3.5–397.9 pg/mL** **Tanner Stage III: 14.8–574.6 pg/mL** **Tanner Stage IV & V: 44.9–511.8 pg/mL** *(continued on page 7)*	3/1/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Dihydrotestosterone *(continued from page 6)*		Female **Premature: 20.0–130.0 pg/mL** **Full Term: 20.0–150.0 pg/mL** **1 Week–9 Years: 0.0–49.9 pg/mL** **10–19 Years: 50.0–170.0 pg/mL** **20 Years and older: 24.0–208.0 pg/mL** **Tanner Stage I: 1.0–64.3 pg/mL** **Tanner Stage II: 5.5–95.9 pg/mL** **Tanner Stage III: 11.4–158.3 pg/mL** **Tanner Stage IV & V: 18.7–193.8 pg/mL** **Days Performed: Tuesday–Sunday** **Reported: 2–5** days **CPT: 82542 x 1**	
FISH Insight Analysis	ISIGHT	**Special Information:** Do not centrifuge for any reason. **It is standard of care that patients having InSight also have chromosome analysis performed to confirm InSight findings and to identify other abnormalities undetectable by InSight.**	1/5/18
GAD65 Antibody, CSF	GADCSF	**Special Information:** This test should not be requested in patients who have recently received radioisotopes, therapeutically or diagnostically, because of potential assay interference. The specific waiting period before specimen collection will depend on the isotope administered, the dose given and the clearance rate in the individual patient. Specimens will be screened for radioactivity prior to analysis. Radioactive specimens received in the laboratory will be held one week and assayed if sufficiently decayed, or canceled if radioactivity remains. **Grossly hemolyzed specimens will be rejected. Specimens exhibiting gross lipemia or gross icterus will also be rejected.** **Clinical Information: Useful in evaluating patients with stiff-man syndrome, autoimmune cerebellitis and other acquired central nervous system disorders affecting gabaminergic neurotransmission.** **Specimen Requirement:** 1 mL cerebrospinal fluid (CSF) in a **sterile** container; Minimum: **1 mL;** Refrigerated **Stability:** Ambient: 72 hours Refrigerated: **28** days Frozen: **28 days**	1/12/18
Glucagon	GLUCA	**Special Information: Grossly hemolyzed specimens are unacceptable. Separate specimens must be submitted when multiple tests are ordered. This test is New York DOH approved.** **Clinical Information: Aid in evaluation of autoimmune liver disease.** **Specimen Requirement: 1 mL** plasma **collected using Protease Inhibitor tube (PPACK; Phe-Pro-Arg-chloromethylketone) (ARUP supply #49662);** Minimum: 0.5 mL; **A winged collection set must be used; Mix well;** Separate from cells **within 1 hour of collection and transfer plasma to standard aliquot tube; Separate specimens must be submitted when multiple tests are ordered;** Frozen **Stability:** Ambient: **After separation from cells:** Unacceptable Refrigerated: **After separation from cells: 48 hours** Frozen: **After separation from cells: 3 months** **Methodology: Quantitative Radioimmunoassay** **Reference Range:** **Adult: ≤ 208 ng/L** **Days Performed: Tuesday** **Reported: 4–12** days	2/28/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Granulocyte Antibodies	NEUTR	**Special Information: This test is New York DOH approved. Ship frozen on dry ice.** **Clinical Information: Neutrophil-associated antibodies may cause neutropenia in various autoimmune disorders including Felty syndrome, SLE and drug-induced neutropenia. Febrile transfusion reactions and isoimmune neonatal neutropenia may also be caused by antibodies to neutrophil-specific antigens or HLA antigens. A positive result on this test is not definitive for specific anti-neutrophil antibodies, since anti-HLA antibodies and immune complexes may also cause a positive result. The results of this test should be correlated to clinical history and other data. Circulating antibodies in patient's serum are measured by flow cytometry after incubation with normal neutrophils. Values greater than 2 standard deviations of a normal control population are interpreted as "weakly positive" and greater than 3 standard deviations as "positive."** **Specimen Requirement: 3 mL** serum from a plain no additive (red) tube; Minimum: **0.5 mL; Remove serum from cells ASAP or within 2 hours of collection; Transfer serum to standard aliquot tube and freeze; Ship frozen on dry ice; Frozen** *OR* **3 mL** serum from a **serum separator (gold) tube;** Minimum: **0.5 mL; Remove serum from cells ASAP or within 2 hours of collection; Transfer serum to standard aliquot tube and freeze; Ship frozen on dry ice; Frozen** **Stability:** Ambient: **After separation from cells: Unacceptable** Refrigerated: **After separation from cells: Unacceptable** Frozen: **After separation from cells: 1 month** **Methodology: Flow Cytometry (FC)** **Reference Range: Negative** **Days Performed:** Monday, **Thursday** **Reported: 2–6** days	3/8/18
HCG, Qualitative, Urine	UHCG	**CPT: 81025 x 1**	3/1/18
Hemoglobin A1C	HBA1C	**Special Information: The HbA1c test is not intended for analysis of samples collected from newborns. The HbA1c test should not be used to replace glucose testing in pediatric patients, pregnant women, or patients with Type 1 diabetes. In cases of rapidly evolving Type 1 diabetes, the increase of HbA1c values might be delayed compared to the acute increase in glucose concentrations. In these conditions, diabetes mellitus must be diagnosed based on plasma glucose concentration and/or the typical clinical symptoms. The HbA1c test should not be used to diagnose diabetes during pregnancy** or to diagnose gestational diabetes. **HbA1c reflects the average blood glucose levels over the preceding 3 months (the average life of a red blood cell), and therefore may be falsely low during pregnancy or any other condition associated with recent onset of hyperglycemia and/or decreased red cell survival.** The oral glucose tolerance test (OGTT) and/or fasting blood glucose test is performed instead for gestational diabetes diagnosis and maintenance. **The HbA1c test should not be used to diagnose diabetes in patients with any condition that alters the life span of the red blood cells, including recent blood loss, transfusion, significant iron deficiency,** hemolytic anemia **(including hereditary spherocytosis)** or other hemolytic diseases, hemoglobinopathies and thalassemias, **as the altered red blood cell turnover interferes with the relationship between mean blood glucose and HbA1c values.** **The HbA1c test should not be used to diagnose diabetes in patients with malignancies or severe chronic hepatic and renal disease. Hemoglobin Variants: The most common heterozygous hemoglobin variants (i.e., HbAS, HbAC, HbAD, and HbAE) do not interfere with the test. In the homozygous and double-heterozygous forms of variant hemoglobins (e.g., SS, CC, SC), there is no HbA present; therefore, no HbA1c value can be determined. Other abnormal hemoglobin variants have not been evaluated on the D-100 HbA1c test. Hemoglobin F concentrations up to 30% do not interfere with the test. Any sample with HbF > 5% should be suspected of having a hemoglobinopathy. ß-thalassemia trait, as indicated by increased HbA2 concentrations, does not interfere with the test. Labile A1c, as indicated by glucose concentrations up to 1200 mg/dL, does not interfere with the assay. At physiologically occurring concentrations, there is no interference from carbamylated hemoglobin or acetylated hemoglobin. For the confirmation of any particular hemoglobin variant, alternative methods are required.** *(continued on page 9)*	Effective immediately

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Hemoglobin A1C *(continued from page 8)*		**Stability:** Ambient: **5** days Refrigerated: **14** days Frozen: 6 months **Methodology:** **High Performance Liquid Chromatography (HPLC)** **Ion Exchange Chromatography**	
Herpes Simplex Virus by PCR, CSF	HSPCRC	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** HSV PCR Spec Source **HSV-1** **HSV-2**	3/1/18
Hyperoxaluria, Urine	UHYPER	**Special Information:** Informed consent is required for patients residing in New York State. **Specimens with preservatives will be rejected.** **Clinical Limitation: Ascorbic acid will falsely elevate oxalic acid results.** **Clinical Information:** Increased concentrations of oxalate and glycolate indicate type 1 hyperoxaluria. Increased concentrations of oxalate and glycerate indicate type 2 hyperoxaluria. **Increased concentrations of oxalate and 4-hydroxy-2-oxoglutarate indicate type 3 hyperoxaluria.** Increased concentrations of oxalate with normal concentrations of glycolate, glycerate, **and 4-hydroxy-2-oxoglutarate** indicate secondary hyperoxaluria. **Methodology:** GC-MS **Stable Isotope Dilution Analysis** **Reference Range:** Glycolate **0–17 Years: ≤ 75 mg/g crt** **18–99 Years: ≤ 50 mg/g crt** Glycerate 0–31 Days: **≤ 75 mg/g crt** **32 Days–4 Years: ≤ 125 mg/g crt** **5–10 Years: ≤ 55 mg/g crt** 11–99 Years: **≤ 25 mg/g crt** Oxalate **0–6 Months: ≤ 400 mg/g crt** **7 Months–1 Year: ≤ 300 mg/g crt** **2–6 Years: ≤ 150 mg/g crt** 7–10 Years: **≤ 100 mg/g crt** 11–99 Years: **≤ 75 mg/g crt** 4-Hydroxy-2-Oxoglutarate (HOG) **0–99 Years: ≤ 10 mg/g crt**	1/15/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
IBD Serology Disease Panel	IBDSER	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** Saccharomyces cerevisiae IgA Saccharomyces cerevisiae IgG Neutrophil Specific Abs **Inflammatory Bowel Disease Interp** **EER Inflammatory Bowel Disease Panel** **Special Information: Contaminated, heat-inactivated, hemolyzed, or severely lipemic specimens are unacceptable. This test is New York DOH approved.** **Clinical Information:** This test may be a useful tool for distinguishing ulcerative colitis (UC) from Crohn disease (CD) in patients with suspected inflammatory bowel disease. **If the ANCA screen detects antibodies at a 1:20 dilution or greater, then a titer to end point will be added. Additional charges apply. ANCA IFA is simultaneously tested on ethanol- and formalin-fixed slides to allow differentiation of C- and P-ANCA patterns.** **Specimen Requirement: 1.5 mL** serum from a serum separator (gold) tube; Minimum: **0.6 mL; Separate from cells ASAP or within 2 hours of collection and transfer to standard aliquot tube;** Refrigerated **Stability:** Ambient: **After separation from cells: 48 hours** Refrigerated: **After separation from cells: 2 weeks** Frozen: **After separation from cells: 1 year (Avoid repeated freeze/thaw cycles)** **Methodology:** **Semi-Quantitative** Enzyme Linked Immunosorbent Assay **Semi-Quantitative** Indirect **Fluorescent Antibody** **Reference Range:** Saccharomyces cerevisiae IgA Negative: ≤ 20.0 U Equivocal: 20.1–24.9 U Positive: **≥ 25.0 U** Saccharomyces cerevisiae IgG Negative: ≤ 20.0 U Equivocal: 20.1–24.9 U **Positive: ≥ 25.0 U** Neutrophil Specific Abs: **< 1:20: Not significant** **Days Performed: Sunday–Saturday** **Reported:** 2–**5** days **CPT:** 86255 x 1, **86671 x 2**	2/28/18
LC-MS/MS Thyroglobulin measurement for Thyroglobulin Antibody Interference	TGMSMS	**Special Information: Samples left ambient for greater than 1 day are unacceptable. This test is New York DOH approved.** **Clinical Information: Recommended test for quantifying thyroglobulin in individuals with antithyroglobulin antibodies. Aids in surveillance of residual/ recurrent thyroid cancer in individuals who have developed antibodies to thyroglobulin. The lower limit of detection is 0.5 ng/mL.** **Specimen Requirement: 1.5 mL** serum from a serum separator (gold) tube; Minimum: **0.7 mL; Separate from cells and transfer into standard aliquot tube; Refrigerated** *OR* **1.5 mL plasma from a sodium or lithium heparin (green) tube;** Minimum: **0.7 mL; Separate from cells and transfer into standard aliquot tube; Refrigerated** **Stability:** Ambient: **After separation from cells: 1 day** Refrigerated: **After separation from cells: 1 week** Frozen: **After separation from cells: 1 year** **Reference Range:** **6 Months–3 Years: 7.4–48.7 ng/mL** **4–7 Years: 4.1–40.5 ng/mL** **8–17 Years: 0.8–29.4 ng/mL** **18 Years and older: 1.3–31.8 ng/mL** **Days Performed:** Monday, Wednesday, **Thursday, Saturday** **Reported: 2–7** days	3/6/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Lipid Panel, Basic	LIPB	**Note:** *This test was previously announced in the December 2017 Technical Update. Please note that "calculated" has been removed from several of the component names.* **Includes:** Triglyceride Cholesterol, Total HDL Cholesterol VLDL Cholesterol *(removed calculated)* LDL Cholesterol *(removed calculated)* Total Cholesterol to HDL ratio *(removed calculated)* LDL to HDL ratio *(removed calculated)* Fasting Time Non HDL Cholesterol *(removed calculated)*	1/15/18
Osteocalcin	OSTEOC	**Special Information: At least eight hours before this blood test, do not take multivitamins or dietary supplements containing biotin or vitamin B7 that are commonly found in hair, skin and nail supplements and multivitamins.** **Specimen Requirement:** 0.5 mL serum from a serum separator (gold) tube; Minimum: 0.3 mL; Allow blood to clot thoroughly at room temperature before centrifugation; Centrifuge and separate serum from cells ASAP or within 2 hours of collection; Frozen *OR* 0.5 mL **serum from a plain no additive (red) tube;** Minimum: 0.3 mL; Allow blood to clot thoroughly at room temperature before centrifugation; Centrifuge and separate **serum** from cells ASAP or within 2 hours of collection; Frozen **Reference Range:** 18–99 Years: **8.6–37.6 ng/mL** **Days Performed: Monday, Wednesday, Friday** **Reported:** 2–**3** days	3/6/18
PAI-1 Genotype 5G/4G	PAIGEN	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** **PAI-1 Specimen** **PAI-1 Interpretation** **Special Information: This test is New York DOH approved.** **Clinical Limitation: Variants in the PAI-1 (SERPINE1) gene, other than the 4G/5G polymorphism, are not evaluated. Diagnostic errors can occur due to rare sequence variations.** **Clinical Information: Screens for genetic susceptibility for venous thromboembolism (VTE) or myocardial infarction (MI) in individuals with a personal or family history of thrombotic events. Aids risk/benefit assessment for preventive or therapeutic interventions for VTE or MI. Background Information: Characteristics: The 4G allele within the promoter region of the PAI-1 (SERPINE1) gene is associated with higher plasma PAI-1 activity when compared with the 5G allele. Heterozygosity or homozygosity for the 4G allele confers a risk for venous thromboembolism (VTE), especially in individuals with other thrombophilic risk factors, as well as a risk for myocardial infarction. Frequency of the 4G Allele: Caucasian 0.52, Hispanic 0.38, African-American 0.13-0.28. Variant Tested: The PAI-1 promoter 4G/5G polymorphism located in the promoter region of the SERPINE1 gene. NM_000602.3(SERPINE1) c.-817dupG (from start of translation). Inheritance: Autosomal dominant. Clinical sensitivity: Unknown. Methodology: Polymerase chain reaction and fluorescence monitoring. Analytical Sensitivity and Specificity: 99%** **Specimen Requirement: 3 mL** whole blood in an EDTA (lavender) tube; Minimum: **1 mL; Send 3 mL whole blood;** Refrigerated *OR* **3 mL** whole blood in an **ACD A or B (yellow) tube;** Minimum: **1 mL; Send 3 mL whole blood;** Refrigerated **Stability:** Ambient: **72 hours** Refrigerated: **1 week** Frozen: Unacceptable **Methodology:** **Fluorescence Monitoring** Polymerase Chain Reaction (PCR) **Days Performed:** Monday, **Thursday** **Reported: 8–11** days	3/8/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Platelet Dependent Antibody, Unfractionated Heparin	SERORE	**For Interfaced Clients Only: Test build may need to be modified** **Includes:** **SRA, Unfractionated Heparin** SRA, Unfractionated Heparin, Low Dose SRA, Unfractionated Heparin, High Dose Platelet Dependent Antibody, Unfractionated Heparin **Special Information: This test is New York DOH approved.** **Clinical Information: Use as gold standard test for diagnosis of heparin-induced thrombocytopenia (HIT).** **Specimen Requirement:** 5 mL serum from a serum separator (gold) tube; Minimum: 1 mL; **Transfer 5 mL serum to standard aliquot tube; Frozen** **Stability:** Ambient: Unacceptable Refrigerated: **1 week** Frozen: **Indefinitely** **Reference Range: Refer to report** **Days Performed:** Monday–Saturday **Reported: 3**–5 days	3/1/18
PTH, Intact	PTHI	**Special Information:** Serum stability: Stable for 8 hours at 15–25 °C, 2 days at 2–8 °C, and 6 months at minus 20 °C. Note that the specimen needs to be spun after the specimen clots. Plasma stability: Stable for 3 days at 15–25 °C, 3 days at 2–8 °C, and 6 months at minus 20 °C. Note that the EDTA lavender tube needs to be spun down, and the plasma needs to be transferred into a labeled transfer tube and sent to the lab. **Samples should not be taken from patients receiving therapy with high biotin doses (i.e., > 5 mg/day) until at least 8 hours following the most recent biotin administration.**	1/15/18
Rickettsia rickettsii IgG & IgM Abs	ROCKY	**Special Information:** Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens. **Contaminated, hemolyzed, or severely lipemic specimens are unacceptable. This test is New York DOH approved.** **Clinical Information: This is the preferred test for acute or convalescent phase of disease. Acute and convalescent titers are often necessary. Antibody reactivity to Rickettsia rickettsii antigen should be considered Spotted Fever group reactive. Other organisms within the group include R. akari, R. conorii, R. australis, and R. sibirica. Seroconversion, a fourfold or greater rise in antibody titer, between acute and convalescent sera is considered strong evidence of recent infection. Acute-phase specimens are collected during the first week of illness, and convalescent-phase samples are generally obtained 2–4 weeks after resolution of illness. Ideally these samples should be tested simultaneously at the same facility. If the sample submitted was collected during the acute-phase of illness, submit a labeled convalescent sample within 25 days for paired testing.** The CDC does not use IgM results for routine diagnostic testing of Rocky Mountain Spotted Fever, as the response may not be specific for the agent (resulting in false positives), and the IgM response may be persistent from past infection. **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: **0.1 mL;** Separate serum from cells ASAP **or within 2 hours of collection and transfer to standard aliquot tube; Parallel testing is preferred and convalescent specimens MUST be received within 30 days from receipt of the acute specimens; Label specimens plainly as 'acute' or 'convalescent;'** Refrigerated **Stability:** Ambient: **After separation from cells: 48 hours** Refrigerated: **After separation from cells:** 2 weeks Frozen: **After separation from cells: 1 year** (Avoid repeated freeze/thaw cycles) **Methodology: Semi-Quantitative** Indirect Fluorescent Antibody *(continued on page 13)*	3/6/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Rickettsia rickettsii IgG & IgM Abs *(continued from page 12)*		**Reference Range:** Rocky Mt Spot Fev Ab IgG Less than 1:64: Negative–**No significant level of IgG antibody detected** **1:64–1:128: Low Positive–Presence of IgG antibody detected, suggestive of current or past infection** **1:256 or greater: Positive–Presence of IgG antibody suggestive of recent or current infection** Rocky Mt Spot Fev Ab IgM Less than 1:64: Negative–**No significant level of IgM antibody detected** **1:64 or greater: Positive–Presence of IgM antibody detected, which may indicate a current or recent infection; however, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection** **Days Performed: Monday**–Friday **Reported: 2–5** days	
Rufinamide	RUFIN	**Special Information: Patient Prep: Timing of specimen collection: Pre-dose (trough) draw–At steady state concentration. Whole blood is not acceptable. Gel separator tubes, light blue (citrate), or yellow (SPS or ACD solution) are unacceptable. This test is New York DOH approved.** **Clinical Information: Optimize drug therapy and monitor patient adherence. Adverse effects may include somnolence, vomiting, headache and fatigue.** **Specimen Requirement: 1 mL** serum from a plain no additive (red) tube; Minimum: **0.5 mL; Patient Prep: Timing of specimen collection: Pre-dose (trough) draw–At steady state concentration;** Do not use serum separator tubes; **Separate serum from cells within 2 hours and transfer to standard aliquot tube;** Refrigerated *OR* **1 mL** plasma from an **EDTA (lavender) tube;** Minimum: **0.5 mL; Patient Prep: Timing of specimen collection: Pre-dose (trough) draw–At steady state concentration; Separate plasma from cells within 2 hours and transfer to standard aliquot tube;** Refrigerated **Stability:** Ambient: **After separation from cells: 2 weeks** Refrigerated: **After separation from cells: 2 weeks** Frozen: **After separation from cells: 2 weeks** **Methodology: Quantitative** Liquid Chromatography–Tandem Mass Spectrometry **Reference Range:** **Therapeutic Range: Not well established** **Dose-related range (values at dosages of 800–7200 mg/day): 3–30 μg/mL** **Days Performed: Monday–Friday** **Reported: 2**–5 days	3/15/18
T3 Uptake	T3U	**Special Information: Grossly hemolyzed specimens are unacceptable. This test is New York DOH approved.** **Clinical Information: T3 uptake is of little clinical value alone. It is used to determine the Free Thyroxine Index and is not recommended for routine thyroid screening.** **Specimen Requirement: 1 mL** serum from a serum separator (gold) tube; Minimum: **0.5 mL; Allow serum to clot completely at room temperature;** Separate serum from cells **ASAP or** within 2 hours of collection **and transfer to standard aliquot tube;** Refrigerated *OR* **1 mL plasma from a sodium heparin (light green) plasma separator tube (PST);** Minimum: **0.5 mL;** Separate plasma from cells **ASAP or** within 2 hours of collection **and transfer to standard aliquot tube;** Refrigerated *OR* **1 mL plasma from a lithium heparin (light green) plasma separator tube (PST);** Minimum: **0.5 mL;** Separate plasma from cells **ASAP or** within 2 hours of collection **and transfer to standard aliquot tube;** Refrigerated *OR* **1 mL plasma from an EDTA (lavender) tube;** Minimum: **0.5 mL;** Separate plasma from cells **ASAP or** within 2 hours of collection **and transfer to standard aliquot tube;** Refrigerated *OR* **1 mL plasma from a sodium or lithium heparin (green) tube;** Minimum: **0.5 mL;** Separate plasma from cells **ASAP or** within 2 hours of collection **and transfer to standard aliquot tube;** Refrigerated *(continued on page 14)*	2/28/18

Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
T3 Uptake *(continued from page 13)*		**Stability:** Ambient: After separation from cells: **8 days** Refrigerated: After separation from cells: **2 weeks** Frozen: After separation from cells: **2 years** **Reference Range: 28–41% uptake** **Days Performed: Sunday**–Saturday **Reported:** 2–3 days	
Tobramycin, Post Dose	TOBRPO	**Special Information: Do not collect in a gel separator tube. Samples that contain tobramycin in combination with either amikacin or kanamycin cannot be reliably quantitated by this assay.**	2/28/18
Tobramycin, Pre Dose	TOBRPR	**Special Information: Do not collect in a gel separator tube. Samples that contain tobramycin in combination with either amikacin or kanamycin cannot be reliably quantitated by this assay.**	2/28/18
Tobramycin, Random	TOBRRA	**Special Information: Do not collect in a gel separator tube. Samples that contain tobramycin in combination with either amikacin or kanamycin cannot be reliably quantitated by this assay.**	2/28/18
Vitamin B12	B12	**Stability:** Ambient: **24 hours** Refrigerated: 24 hours Frozen: 2 months, freeze once, protect from light **Reference Range: 232-1245 pg/mL**	Effective immediately
Voltage-Gated Calcium Channel IgG Autoantibodies	VOLTCA	**Special Information: Plasma is not acceptable. Hemolyzed or grossly lipemic specimens are unacceptable.** **Clinical Information: Aid in the evaluation of muscle weakness in the context neuromuscular junction disorder with or without cancer,** or the diagnosis of paraneoplastic neurological syndromes. **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: 0.2 mL; **Separate from cells ASAP or within 2 hours of collection and transfer to standard aliquot tube; Refrigerated** *OR* 1 mL serum from a plain no additive (red) tube; Minimum: 0.2 mL; **Separate from cells ASAP or within 2 hours of collection and transfer to standard aliquot tube; Refrigerated** **Stability:** Ambient: **After separation from cells: 8 hours** Refrigerated: **After separation from cells: 2 weeks** Frozen: **After separation from cells: Indefinitely** **Methodology: Quantitative** Radioimmunoassay **Reference Range:** **Negative: 0.0 to 24.5 pmol/L** **Indeterminate: 24.6 to 45.6 pmol/L** **Positive: 45.7 pmol/L or greater** **Days Performed: Tuesday** **Reported: 2–9** days	3/6/18
ZAP-70 Analysis by Flow Cytometry	ZAP70	**Special Information: Ship blood or bone marrow at room temperature. Grossly hemolyzed specimens will be rejected. Yellow top ACD B tubes are not acceptable.** **Specimen Requirement:** 5 mL whole blood in an EDTA (lavender) tube; Minimum: 1 mL; Send to Cleveland Clinic Laboratories ASAP on the day of collection; Ambient *OR* 5 mL whole blood in a **sodium heparin (green) tube;** Minimum: 1 mL; Send to Cleveland Clinic Laboratories ASAP on the day of collection; Ambient *OR* 5 mL bone marrow in a **sodium heparin (green) tube;** Minimum: 1 mL; Send to Cleveland Clinic Laboratories ASAP on the day of collection; Ambient	1/22/18

New Tests

Test Name	Order Code	Change	Effective Date
Antidepressant Panel Quantitative, Urine	UTCAQT	**Special Information:** Panel includes: Amitriptyline, Amoxapine, Clomipramine, Desmethylclomipramine, Desipramine, Doxepin, Desmethyldoxepin, Desmethyltrimipramine, Fluoxetine, Norfluoxetine, Imipramine, Maprotiline, Mirtazapine, Nortriptyline, Protriptyline, Trazodone and Trimipramine. This test is New York DOH approved. **Clinical Limitation:** Desmethylsertraline (Sertraline metabolite) and Norcyclobenzaprine (Cyclobenzaprine metabolite) are known interferences for Protriptyline. **Specimen Requirement:** 2 mL random urine in a clean container; Minimum: 0.7 mL; Transfer 2 mL urine to standard aliquot tube; Refrigerated **Stability:** Ambient: 1 week Refrigerated: 11 days Frozen: 2 weeks **Methodology:** Quantitative Gas Chromatography Gas Chromatography Mass Spectrometry (GCMS) **Days Performed:** Varies **Reported:** 8–16 days **CPT:** 80332 x 1, 80337 x 1, 80338 x 1 **Price:** $249.00 (non-discountable)	3/1/18
Aquaporin-4 Receptor Antibody, IgG by IFA, CSF with Reflex to Titer	AQPCSF	**Special Information:** Hemolyzed, contaminated specimens or severely lipemic specimens are unacceptable. This test is New York DOH approved. **Clinical Information:** Use in conjunction with serum autoantibody tests to diagnose neuromyelitis optica (NMO). Diagnosis of neuromyelitis optica (NMO) requires the presence of longitudinally extensive acute myelitis (lesions extending over 3 or more vertebral segments) and optic neuritis. Approximately 75% of patients with NMO express antibodies to the aquaporin-4 (AQP4) receptor. While the absence of AQP4 receptor antibodies does not rule out a diagnosis of NMO, presence of this antibody is diagnostic for NMO. If AQP4 antibody IgG is positive, then an AQP4 antibody IgG titer is reported. Additional charges apply. **Specimen Requirement:** 0.5 mL cerebrospinal fluid (CSF) in a clean container; Minimum: 0.15 mL; Transfer 0.5 mL CSF to standard aliquot tube; Refrigerated **Stability:** Ambient: 48 hours Refrigerated: 2 weeks Frozen: 1 year **Methodology:** Semi-Quantitative Indirect Fluorescent Antibody **Reference Range:** < 1:1 **Days Performed:** Wednesday **Reported:** 2–9 days **CPT:** 86255 x 1 **Price:** $325.00 (non-discountable)	3/8/18

New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Fungal Antibodies with Reflex to Blastomyces dermatitidis Antibodies by Immunodiffusion, CSF	FANCSF	**Special Information:** If Blastomyces antibodies are equivocal or positive by EIA, then Blastomyces Immunodiffusion will be added at an additional charge. Body fluids other than cerebrospinal fluid (CSF) are not acceptable. Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens are unacceptable. **Clinical Information:** Negative fungal serology does not rule out the possibility of current infection. **Specimen Requirement:** 1 mL cerebrospinal fluid (CSF) in a clean container; Minimum: 0.35 mL; Transfer 1 mL CSF into standard aliquot tube; Refrigerated **Stability:** Ambient: 48 hours Refrigerated: 2 weeks Frozen: 1 year (Avoid repeated freeze/thaw cycles) **Methodology:** Semi-Quantitative Complement Fixation Semi-Quantitative Enzyme Linked Immunosorbent Assay Immunodiffusion (ID) **Reference Range:** Aspergillus Antibodies, CSF by CF: < 1:2 Blastomyces Antibody by ELISA, CSF Negative: ≤ 0.9 IV Equivocal: 1.0–1.4 IV Positive: ≥ 1.5 IV Coccidioides Antibody by CF, CSF: < 1:2 Histoplasma Mycelia by CF: < 1:2 Histoplasma Yeast by CF: < 1:2 Blastomyces Ab by Immunodiffusion, CSF: None detected **Days Performed:** Sunday–Saturday **Reported:** 3–7 days **CPT:** 86606 x 1, 86612 x 1, 86635 x 1, 86698 x 2	1/3/2018
Iodine, Urine	UIODNE	**Special Information:** Must collect in plastic container. Indicate total volume and collection time interval. Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications for 48 hours (upon the advice of their physician). Additionally, the administration of iodine-based contrast media and drugs containing Iodine may yield elevated results. Unacceptable conditions: Specimens not received in trace element-free tubes, urine collected within 48 hours after administration of a gadolinium (Gd) or iodine (I) containing contrast media (may occur with MRI studies), acid preserved urine, specimens contaminated with blood or fecal material, specimens transported in non-trace element-free transport tube (with the exception of the original device). This test is New York DOH approved. **Clinical Information:** Recommended for the assessment of iodine nutritional status. This test reports total iodine from all iodine-containing species present in the specimen but does not determine the chemical form (species) of the iodine present. Values > 1000 μg/L may indicate dietary excess, but more frequently suggest recent drug or contrast media exposure. **Specimen Requirement:** 8 mL 24-hour urine (well-mixed) in a plastic container; Minimum: 1 mL; Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances; Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications for 48 hours (upon the advice of their physician); Note: Administration of iodine-based contrast media and drugs containing Iodine may yield elevated results; Must collect specimen in a plastic container; Transfer well-mixed urine to a trace element-free tube (ARUP supply #43116); Record total volume and collection time interval on transport tube and requisition; Refrigerate after collection; Refrigerated *(continued on page 17)*	3/8/18

New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Iodine, Urine *(continued from page 16)*		*OR* 8 mL random urine in a plastic container; Minimum: 1 mL; Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances; Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications for 48 hours (upon the advice of their physician); Note: Administration of iodine-based contrast media and drugs containing Iodine may yield elevated results; Must collect specimen in a plastic container; Transfer well-mixed urine to a trace element-free tube (ARUP supply #43116); Record total volume on transport tube and requisition; Refrigerate after collection; Refrigerated **Stability:** Ambient: 2 months Refrigerated: 2 months Frozen: 2 months **Methodology:** ICP/Mass Spectrometry **Reference Range:** Iodine, Urine–per volume 16 Years and older: 26.0–705.0 µg/L Iodine, Urine–per 24h 16 Years and older: 93.0–1125.0 µg/d Iodine per gram of Creatinine No reference interval (µg/g crt) Creatinine, Urine–per 24h Male 3–8 Years: 140–700 mg/d 9–12 Years: 300–1300 mg/d 13–17 Years: 500–2300 mg/d 18–50 Years: 1000–2500 mg/d 51–80 Years: 800–2100 mg/d 81 Years and older: 600–2000 mg/d Female 3–8 Years: 140–700 mg/d 9–12 Years: 300–1300 mg/d 13–17 Years: 400–1600 mg/d 18–50 Years: 700–1600 mg/d 51–80 Years: 500–1400 mg/d 81 Years and older: 400–1300 mg/d **Days Performed:** Tuesday, Thursday, Saturday **Reported:** 2–6 days **CPT:** 83018 x 1 **Price:** $75.00 (non-discountable)	
Lipid Panel, Nonfasting	LIPNF	**Note:** *This test was previously announced in the December 2017 Technical Update. Please note that "calculated" has been removed from several of the component names.* **Includes:** Triglycerides, Nonfasting Total Cholesterol, Nonfasting HDL Cholesterol, Nonfasting VLDL Cholesterol, Nonfasting *(removed calculated)* LDL Cholesterol, Nonfasting *(removed calculated)* Total Cholesterol to HDL ratio, Nonfasting *(removed calculated)* LDL to HDL ratio, Nonfasting *(removed calculated)* Non HDL Cholesterol, Nonfasting *(removed calculated)*	1/15/18

New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Pancreatic Polypeptide by Quantitative Radioimmunoassay	PANPOL	**Special Information:** Patient Prep: Patient should be fasting for 10 hours prior to specimen collection. Plasma is not acceptable. Severely hemolyzed or lipemic specimens are unacceptable. This test is New York DOH approved. **Clinical Information:** Aids in the diagnosis and monitoring of pancreatic neuroendocrine tumors. **Specimen Requirement:** 1 mL serum from a serum separator (gold) tube; Minimum: 0.5 mL; Patient should be fasting for 10 hours prior to specimen collection; Allow specimen to sit in collection tube for 15–20 minutes at room temperature for proper clot formation; Centrifuge and separate serum from cells ASAP or within 2 hours of collection; Transfer serum to standard aliquot tube; Frozen *OR* 1 mL serum from a plain no additive (red) tube; Minimum: 0.5 mL; Patient should be fasting for 10 hours prior to specimen collection; Allow specimen to sit in collection tube for 15–20 minutes at room temperature for proper clot formation; Centrifuge and separate serum from cells ASAP or within 2 hours of collection; Transfer serum to standard aliquot tube; Frozen **Stability:** Ambient: After separation from cells: 24 hours Refrigerated: After separation from cells: 24 hours Frozen: After separation from cells: 2 months **Methodology:** Quantitative Radioimmunoassay **Reference Range:** 0–435 pg/mL **Days Performed:** Wednesday **Reported:** 4–12 days **CPT:** 83519 x 1 **Price:** $232.00	3/13/18
Pathology Consultation Comprehensive Report		**Specimen Requirement:** (Variable) Hematoxylin and Eosin slides are usually sufficient; When appropriate, please include special stained slides, unstained slides and paraffin blocks; Surgical Pathology requisition must include patient name, clinic number and specimen source; Label paraffin blocks with external hospital name **Methodology:** Microscopy **Days Performed:** Monday–Friday **CPT:** 88325 x 1 **Price:** $380.00	Effective immediately
Thiopurine Metabolites by LC-MS/MS	THIMET	**Special Information:** Patient Prep: Trough collection (within 1 hour prior to the next dose). Send Wednesday–Sunday only. Hemolyzed specimens are unacceptable. This test is New York DOH approved. **Clinical Information:** Optimize therapy for thiopurine drugs. Identify thiopurine metabolite concentrations that may lead to toxicity. **Specimen Requirement:** 5 mL whole blood in an EDTA (lavender) tube; Minimum: 2.5 mL; Patient Prep: Trough collection (within 1 hour prior to the next dose); Draw Sunday–Wednesday only; Must be received in Cleveland Clinic Laboratories by 6 p.m. EST on Wednesday; Refrigerated **Stability:** Ambient: 24 hours Refrigerated: 5 days Frozen: Unacceptable **Methodology:** Quantitative Liquid Chromatography–Tandem Mass Spectrometry **Reference Range:** Refer to report **Days Performed:** Varies **Reported:** 4–8 days **CPT:** 80299 x 1 **Price:** $166.00	3/6/18

Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
Antidepressant Drug Screen Quant., Urine	UTCA	This test will no longer be available. Suggest ordering Antidepressant Panel Quantitative, Urine (UTCAQT).	3/1/18
Estrogen, Total	ESTRGN	This test will no longer be available. Suggest ordering Estrogen, Fractionated Blood (ESTGEN).	3/1/18
Fungal Antibodies by CF, CSF	FABCSF	This test will no longer be available. Suggest ordering Fungal Antibodies with Reflex to Blastomyces dermatitidis Antibodies by Immunodiffusion, CSF (FANCSF).	1/3/18
Herpesvirus 6 IgM Antibodies, CSF	CHHV6M	This test will no longer be available. Suggest ordering Herpesvirus 6 PCR, Quant, CSF (HV6QNT).	1/15/18
IDH1/IDH2 Mutation, FFPE Tissue	IDH12F	This test will no longer be available. Suggest ordering IDH1 & IDH2 Gene Analysis.	3/1/18
Iodine, Random Urine	UIODR	This test will no longer be available. Suggest ordering Iodine, Urine (UIODNE).	3/8/18
Iodine, Urine 24 hours	UIOD24	This test will no longer be available. Suggest ordering Iodine, Urine (UIODNE).	3/8/18
Neuromyelitis Optica (NMO)/Aquaporin-4-IgG FACS Assay, CSF	FNMOA4	This test will no longer be available. Suggest ordering Aquaporin-4 Receptor Antibody, IgG by IFA, CSF with Reflex to Titer (AQPCSF).	3/8/18
Pancreatic Polypeptide	PANC	This test will no longer be available. Suggest ordering Pancreatic Polypeptide by Quantitative Radioimmunoassay (PANPOL).	3/13/18
PRO-PredictR Metabolites	PPR6MP	This test will no longer be available. Suggest ordering Thiopurine Metabolites by LC-MS/MS (THIMET).	3/6/18
Respiratory Culture, Special	RESPSP	This test will no longer be available.	2/27/18