



#### Cleveland Clinic Laboratories

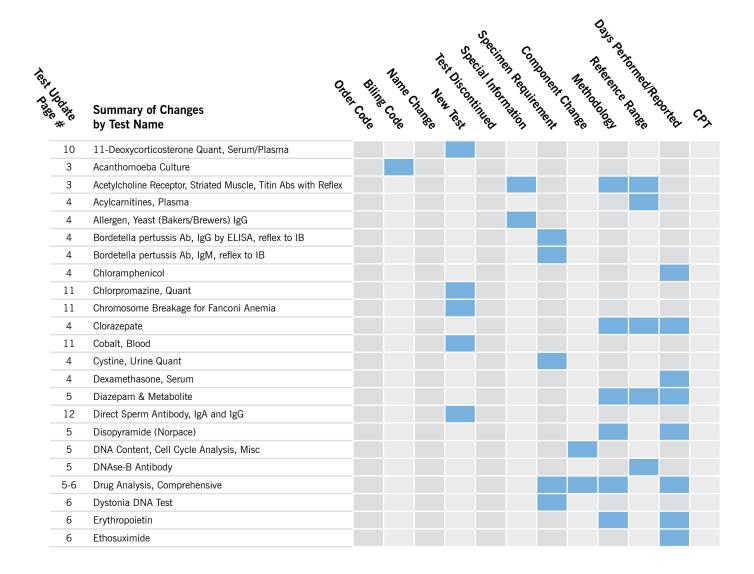
#### Technical Update • November 2013

Cleveland Clinic Laboratories is dedicated to keeping you updated and informed about recent testing changes. That's why we are happy to provide this technical update on a monthly basis.

Recently changed tests are **bolded**, and could include revisions to methodology, reference range, days performed or CPT code. For your convenience, tests are listed alphabetically and the order and billing codes are provided.

If you wish to compare the new information with previous test demographics, refer to the Test Directory, which can be accessed at clevelandcliniclabs.com.

Deleted tests and new tests are listed separately. Please update your database as necessary. For additional detail, contact Client Services at 216.444.5755 or 800.628.6816 or via email at clientservices@ccf.org.



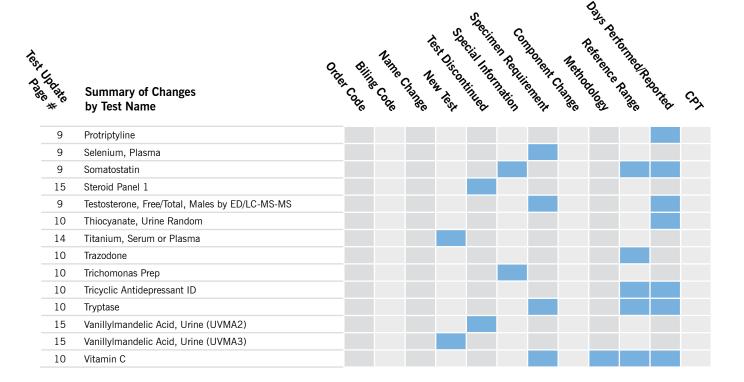
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## Summary of Changes by Test Name

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6	Ethylene Glycol						
12	Fatty Acids, Free (Non-Esterified)						
6	Fatty Acid Profile of Lipids						
12	FISH for Acute Myeloid Leukemia						
13	FISH for B Lymphoblastic Leukemia						
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6	Fluoride, Urine						
6	Fluoxetine/Norfluoxetine						
7	Fluphenazine						
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7	Gabapentin						
13	Giardia Antigen, Stool, EIA						
7	Haloperidol						
7	Heinz Bodies Stain						
13	Hepatitis Delta Antigen						
13	Hepatitis E Antibody IgG						
14	Hepatitis E Antibody IgM						
7	Herpesvirus 6 PCR, Quant						
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14	Histamine, Plasma						
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7	Ibuprofen						
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8	Insulin Like Growth Factor 1						
8	Librium & Metabolite						
14	Melatonin						
8	Mexiletine						
9	Multifocal Neuropathy Evaluation						
14	MYD88 L265P Mutation Analysis						
9	Myelin Basic Protein, CSF						
9	Myeloperoxidase						
15	NS6S Antibody Test						
9	Olanzapine						
9	Pancreatitis Panel						
9	Perphenazine						
9	Pneumococcal IgG Antibodies, 14 Serotypes						
15	Proinsulin						
14	Proinsulin, Intact						
9	Propafenone						

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#### Test Changes

Test Name	Order Code	Billing Code	Change	Effective Date
Acanthomoeba Culture	AMBCUL	89737	Billing Code: Previously 75752	11/7/2013
Acetylcholine Receptor, Striated Muscle, Titin Abs with Reflex	ACESTR	89405	Special Information: If Acetylcholine Receptor Binding Antibody result is greater than 0.4 nmol/L or Acetylcholine Receptor Blocking Antibody result is greater than or equal to 27%, then Acetylcholine Receptor Modulating Antibody will be added at an additional charge. If Striated Muscle Antibody is greater than or equal to 1:40, then a titer will be added at an additional charge.  Methodology:  Semi-Quant Enzyme Linked Immunosorbent Assay (ELISA) Semi-Quant Indirect Fluorescent Antibody (IFA) Quantitative Radioimmunoassay (RIA) Semi-Quant Flow Cytometry  Reference Range: Acetylcholine blocking Ab: Negative: 0 - 26% Blocking Intermediate: 27- 41% Blocking	11/18/2013
			Positive: ≥ 42% Blocking  Ranges for other components are unchanged	

Test Name	Order Code	Billing Code	Change	Effective Date
Acylcarnitines, Plasma	ACYLPL	87890	Reference Range:  (Ranges are for ages ≥ 1 month, unless otherwise specified)  Free L-carnitine: 22 - 53 μM  Total L-carnitine: 27 - 65 μM  Free/Total carnitine ratio: 0.62 - 0.90  Acylcarnitine: 3,190 - 16,729 nM  Propionylcarnitine: 147 - 761 nM  Iso/Butyrylcarnitine: < 300 nM  Iso Val/2-MetButylcarnitine: < 226 nM  Tiglylcarnitine: < 10 nM  Hexanoylcarnitine: 1 month - < 1 year: 24 - 153 nM  ≥ 1 year: < 250 nM  Decanoylcarnitine: 1 month - < 1 year: 31 - 161 nM  ≥ 1 year: < 252 nM  Decenoylcarnitine: 1 month - < 1 year: 31 - 161 nM  ≥ 1 year: 23 - 331 nM  Dodecanoylcarnitine: < 96 nM  Dodecanoylcarnitine: < 42 nM  OH-Dodecanoylcarnitine: < 7 nM  Tetradecanoylcarnitine: < 7 nM  Tetradecanoylcarnitine: < 7 nM  Tetradecanoylcarnitine: < 42 nM  3-OH-Tetradecenoylcarnitine: < 10 nM  Hexadecenoylcarnitine: < 10 nM  Hexadecanoylcarnitine: < 22 nM  3-OH-Hexadecenoylcarnitine: < 2 nM  3-OH-Hexadecanoylcarnitine: < 2 nM  Stearoylcarnitine: < 65 nM  Oleoylcarnitine: < 163 nM  3-OH-Oleoylcarnitine: < 17 nM  Stearoylcarnitine: < 163 nM  3-OH-Oleoylcarnitine: < 17 nM  Stearoylcarnitine: < 163 nM  3-OH-Oleoylcarnitine: < 163 nM  3-OH-Butyryl/IsoButyrylcarnitine: < 58 nM  Glutarylcarnitine: 1 month - < 1 year: 47 nM  ≥ 1 year: < 66 nM  3-OH-IsoValeryl/2-Methyl-3-OH-Butyrylcarnitine: < 41 nM  Malonylcarnitine: 1 month - < 1 year: < 55 nM  ≥ 1 year: < 68 nM	12/10/2013
Allergen, Yeast (Bakers/ Brewers) IgG Bordetella pertussis Ab,	YEAIGG BPGESA	89478 88741	For interfaced clients only, the test build is changing for this test.  Specimen Requirement: 1 mL serum from a serum separator tube; Separate	11/4/2013
IgG by ELISA, reflex to IB			serum from cells ASAP or within 2 hours of collection; Refrigerated	
Bordetella pertussis Ab, IgM, reflex to IB	BPMESA	88742	Specimen Requirement: 1 mL serum from a serum separator tube; Separate serum from cells ASAP or within 2 hours of collection; Refrigerated	12/5/2013
Chloramphenicol	CLORAM	76115	Days Performed: Tuesday, Friday  Reported: 2 - 6 days	11/18/2013
Clorazepate	TRANX	75464	Methodology: Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS) Reference Range: Dose related: $0.1$ - $1.5~\mu g/mL$ (based on common dosage amounts) Days Performed: Tuesday, Friday Reported: $2$ - $6$ days	11/18/2013
Cystine, Urine Quant	UCYSTD	82620	Specimen Requirement: 8 mL random urine in a clean container; Aliquot and freeze ASAP; Clinical information needed with the specimen; Critical Frozen	11/18/2013
Dexamethasone, Serum	DEXA	82965	Days Performed: Sunday Reported: 2 - 9 days	11/18/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Diazepam & Metabolite	DIAZEP	75420	Methodology: Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS)	11/18/2013
			Reference Range: Diazepam: $0.2 - 1.0 \mu g/mL$ (based on normal dosage amounts) Nordiazepam: $0.1 - 1.5 \mu g/mL$ (based on normal dosage amounts)	
			Days Performed: Tuesday, Friday Reported: 2 - 6 days	
Disopyramide (Norpace)	DISO	34032	Methodology: Enzyme Multiplied Immunoassay Technique (EMIT)  Days Performed: Tuesday, Friday  Reported: 2 - 6 days	11/18/2013
DNA Content, Cell Cycle Analysis, Misc	DNAMIS	88088	Includes:    DNA Content    S-Phase Interpretation    DNA Index, Misc For interfaced clients only, the test build is changing for this test.	11/18/2013
DNAse-B Antibody	DASEAB	89459	<b>Reference Range:</b> 0 - 6 years: < <b>250</b> U/mL 7 - 17 years: < <b>310</b> U/mL 18 - 99 years: < <b>260</b> U/mL	11/18/2013
Drug Analysis, Comprehensive	DRANCO	82053	Includes: Acetaminophen, Acetone, Alfentanil Alprazolam and metabolite (as benzodiazepine metabolite) Amitriptyline, Amobarbital, Amoxapine and metabolite Amphetamine, Aripiprazole, Atenolol, Baclofen Barbital, Barbiturates, Benzodiazepine metabolite Benzodiazepines, Benztropine, Brompheniramine Bupivacaine, Buprenorphine, Bupropion, Butabarbital Butalbital and metabolite, Butorphanol, Caffeine Carbamazepine, Carisoprodol, Chlordiazepoxide Chlorpheniramine, Chlorpromazine, Citalopram Clomipramine and Desmethylclomipramine Clonazepam and metabolite, Clonidine Clorazepate (as Desmethyldiazepam), Clozapine Cocaine and metabolite, Codeine, Creatinine, serum Creatinine, urine, Cyclobenzaprine, Desalkylflurazepam Desipramine, Desmethylchordiazepoxide Desmethylcitalopram, Desmethylclozapine Desmethyldiazepam, Desmethylclozapine Desmethyldiazepam, Desmethylclozapine Desmethyldiazepam, Desmethylclozapine Desmethyldiazepam, Desmethylclozapine Diltiazem, Diphenhydramine and metabolite Doxepin and Desmethyldoxepin, Doxylamine, Duloxetine Ethosuximide, Ethyl alcohol, Fentanyl Fluoxetine and Norfluoxetine, Fluphenazine Flurazepam and metabolite (as Benzodiazepine metabolite) Fluvoxamine, Gabapentin, Glutethimide, Guaifenesin Halazepam, Haloperidol, Hydrocodone, Hydromorphone Hydroxyzine, Ibuprofen and metabolite, Imipramine Isopropyl alcohol, Ketamine, Ketoprofen, Lamotrigine Levetiracetam, Levorphanol and/or Dextrorphan Lidocaine and metabolite, Maprotiline Marijuana (as metabolite, Maprotiline Marijuana (as metabolite, Mpha (Ecstasy metabolite) MDMA (Ecstasy), Mefenamic Acid Meperidine and Normeperidine, Mephobarbital Mepivacaine, Meprobamate, Mesoridazine Metaxalone, Meprobamate, Mesoridazine Metaxalone, Methylphenidae, Methodonol Methylphenidae, Methogrolo, Midazolam, Mirtazapine Molindone, Morphine, Naltuphine, Naltrexone Naproxen and metabolite, Nefazodone, Norbuprenorphine Norfentanyl, Nortriptyline, Olanzapine, Opiates Orphenadrine, Oxaprozin, Oxazepam Oxaarbazepine & MHD, Oxycodone, Oxymorphone	12/12/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Drug Analysis, Comprehensive (continued)			Includes (continued): Pentazocine, Pentobarbital, Perphenazine, Phencyclidine Phenmetrazine, Phenobarbital, Phentermine Phenylpropanolamine, Phenytoin, Pimozide Prazepam (as Desmethyldiazepam), Pregabalin Primidone, Procaine, Prochlorperazine, Promethazine Propanolol, Propoxyphene and metabolites Protriptyline, Pseudoephedrine (and/or Ephedrine) Pyrilamine, Quazepam (as Desalkylflurazepam) Quetiapine, Risperidone, Rufinamide, Salicylate Secobarbital, Sertraline and metabolite, Sufentanil Tapentadol, Temazepam, THC (Marijuana) metabolite Theophylline, Thiopental, Thioridazine, Thiothixene Tiagabine, Tizanidine, Tolmetin, Topiramate Tramadol and metabolite (as Benzodiazepine metabolite) Tricyclic antidepressants, Trifluoperazine, Trimipramine Triprolidine, Valproic Acid, Venlafaxine and metabolite Verapamil and metabolite, Zaleplon, Ziprasidone Zolpidem, Zonisamide, Zopiclone & Eszopiclone Specimen Requirement: THIS ASSAY REQUIRES MULTIPLE SPECIMEN TYPES; 10 mL serum from a red top tube *AND* 30 mL random urine in a clean container; Transport both Refrigerated Methodology: Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS) Gas Chromatography (GC-FID), Immunoassay (IA) Days Performed: Sunday - Saturday Reported: 6 - 7 days	
Dystonia DNA Test	DYSTON	83018	Specimen Requirement: 10 mL whole blood in EDTA lavender top tubes. Collect Monday - Wednesday only. Send specimen to Cleveland Clinic Laboratories on the day of collection; Ambient	11/21/2013
Erythropoietin	EPO	29000	Methodology: Immunoenzymatic Assay  Days Performed: Monday, Wednesday, Friday  Reported: 1 - 3 days	12/18/2013
Ethosuximide	ETHO	82692	Days Performed: Tuesday, Wednesday, Saturday Reported: 2 - 6 days	11/18/2013
Ethylene Glycol	ETHYL	77043	Specimen Requirement: 1 mL serum from a red top tube; Do not use serum separator tubes; Separate serum from cells within 2 hours of collection; Refrigerated  Days Performed: Tuesday, Wednesday, Saturday  Reported: 2 - 5 days	11/18/2013
Fatty Acid Profile of Lipids	CFA	76258	Specimen Requirement: 1 mL plasma from an EDTA lavender top tube; Patient should be fasting for 8 - 12 hours prior to collection; Frozen	12/5/2013
Flecainide	FLEC	1024	Specimen Requirement: 2 mL serum from a red top tube; Do not use serum separator tubes; Remove serum from cells within 6 hours of collection; Refrigerated  Days Performed: Tuesday, Thursday, Saturday  Reported: 2 - 6 days	11/18/2013
Fluoride, Urine	UFLUOR	89540	Specimen Requirement: 5 mL random urine collected in a trace metal free or acid-washed plastic container; Aliquot into a trace metal free transport tube (ARUP #43116); Tubes are available by calling Client Services at 800.628.6816 or 216.444.5755; Refrigerated  Methodology: Quantitative Ion-specific Electrode  CPT: 82735, 82570	11/18/2013
Fluoxetine/Norfluoxetine	FLUOX	76252	Days Performed: Sunday, Tuesday Reported: 2 - 7 days	11/18/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Fluphenazine	FLUPH	77104	Specimen Requirement: 1 mL serum from a red top tube; Do not use serum separator tubes; Collect prior to next dose at steady state; Separate serum from cells within 2 hours of collection; Frozen Reference Range: 0.5 - 2.0 ng/mL Days Performed: Monday, Wednesday, Friday Reported: 2 - 6 days	11/18/2013
Gabapentin	GABA	79153	Days Performed: Tuesday - Saturday Reported: 2 - 5 days	11/18/2013
Haloperidol	HALOP	75499	Reference Range: 5.0 - 20.0 ng/mL	11/18/2013
Heinz Bodies Stain	HNZSTN	85500	<b>Specimen Requirement:</b> 4 mL whole blood in an EDTA lavender top tube; <b>Ambient</b>	10/10/2013
Herpesvirus 6 PCR, Quant	HV6QNT	84312	Specimen Requirement: 2 mL plasma from an EDTA lavender top tube; Deliver to Cleveland Clinic Laboratories within 24 hours of collection; MUST be received by 12:00 noon on Fridays; Frozen	11/26/2013
Hirsutism Evaluation Panel	HIRSUT	89407	<b>Specimen Requirement: 2.5 mL</b> serum from a serum separator tube; Separate serum from cells ASAP or within 2 hours of collection; Frozen	11/18/2013
Humoral Immune Panel	HUMORZ	76976	Order Code: Previously HUMORL	12/31/2013
Humoral Immunity Panel II	HUMORA	89574	Order Code: Previously HUMORP  Includes:  Diphtheria Antibody, Tetanus Antibody, S pneumoniae IgG Serotype 1, S pneumoniae IgG Serotype 3, S pneumoniae IgG Serotype 4, S pneumoniae IgG Serotype 5, S pneumoniae IgG Serotype 6B, S pneumoniae IgG Serotype 7F, S pneumoniae IgG Serotype 8, S pneumoniae IgG Serotype 9N, S pneumoniae IgG Serotype 9V, S pneumoniae IgG Serotype 12F, S pneumoniae IgG Serotype 14, S pneumoniae IgG Serotype 18C, S pneumoniae IgG Serotype 19F, S pneumoniae IgG Serotype 23F  Test build will need to be modified  Specimen Requirement: 1 mL serum from a serum separator tube; Refrigerated  Methodology: Multiplex Bead Assay  Reference Range: S pneumoniae IgG Serotype 5: Not established  Ranges for all other components are unchanged  Days Performed: Monday - Saturday  Reported: 2 - 4 days	12/31/2013
Ibuprofen	IBUPRO	77106	Specimen Requirement: 1 mL serum from a red top tube; Do not use serum separator tubes; Draw between 60 - 90 minutes post dose; Separate serum from cells within 2 hours of collection; Refrigerated Reference Range: 10 - 50 μg/mL (may be seen with common doses) Days Performed: Wednesday, Saturday Reported: 2 - 6 days	11/18/2013
Influenza B Antibody	INFLUB	75665	Reference Range: ≤ 0.89 IV: Negative 0.90 - 1.10 IV: Equivocal ≥ 1.11 IV: Positive	11/14/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Insulin Like Growth	ILGF1	75072	Order code: Previously IGF1	12/31/2013
Factor 1			Special Information: Test build will need to be changed	
			Specimen Requirement: 1.0 mL serum from a serum separator tube; Frozen	
			Methodology: Chemiluminescence Immunoassay (CLIA)	
			Reference Range: (ng/mL) Male	
			0 - 11 years: 13 - 100 1 - 3 years: 17 - 144	
			4 - 5 years: 21 - 192	
			6 - 8 years: 26 - 274 9 - 10 years: 38 - 405	
			11 - 15 years: 86 - 498	
			16 - 18 years: 150 - 488 19 - 20 years: 153 - 412	
			21 - 25 years: 127- 320	
			26 - 30 years: 88 - 242 31 - 40 years: 83 - 240	
			41 - 50 years: 74 - 229	
			51 - 60 years: 60 - 211 61 - 70 years: 39 - 231	
			71 - 80 years: 22 - 216	
			81 + years: 16 - 177 Tanner Stage I: 26 - 363	
			Tanner Stage II: 67 - 498	
			Tanner Stage III: 12 - 487 Tanner Stage IV & V: 150 - 455	
			Female	
			0 - 11 years: 11 - 131 1 - 3 years: 15 - 144	
			4 - 5 years: 25 - 205	
			6 - 8 years: 44 - 344 9 - 10 years: 76 - 478	
			11 - 15 years: 129 - 576	
			16 - 18 years: 143 - 446 19 - 20 years: 129 - 361	
			21 - 25 years: 119 - 328	
			26 - 30 years: 107 - 297 31 - 40 years: 93 - 278	
			41 - 50 years: 75 - 249	
			51 - 60 years: 57 - 236 61 - 70 years: 42 - 238	
			71 - 80 years: 29 - 215	
			81+ years: 27 - 170	
			Tanner Stage I: 44 - 344 Tanner Stage II: 75 - 478	
			Tanner Stage IV 8 V. 143 446	
			Tanner Stage IV & V: 143 - 446  Days Performed: Monday, Wednesday, Friday	
			Reported: 1 - 3 days	
Librium & Metabolite	LIBRI	77069	Methodology: Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS)	11/18/2013
			Reference Range: Librium: $0.5 - 3.0 \mu g/mL$ (Based on adult dose $5 - 100 mg$ ) Nordiazepam: $0.1 - 1.5 \mu g/mL$ (Based on normal dosages)	
			Days Performed: Tuesday, Friday	
			Reported: 2 - 6 days	
Mexiletine	MEXIL	75504	Days Performed: Tuesday, Thursday, Saturday	11/18/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Multifocal Neuropathy Evaluation	MULNEU	82185	Components:  PMP22 Duplication/Deletion Anti-GM1 Anti-GD1a Anti-asialo GM1 Anti-GD1b NS6S Antibody (this will not be available due to reagent unavailability)	11/26/2013
Myelin Basic Protein, CSF	СМВР	41045	Specimen Requirement: 1 mL cerebrospinal fluid (CSF) in a sterile container; If CSF is bloody, centrifuge the sample and separate supernatant from cells prior to freezing the sample; Frozen  Methodology: Chemiluminescence Immunoassay (CLIA)  Reference Range: 0.00 - 5.50 ng/mL	10/7/2013
Myeloperoxidase	MPO	83343	Reference Range: Relative Risk: (pmol/L) Low: < 420 (Apparently healthy population) Moderate: 420 - 479 (Intermediate risk for cardiovascular event) High: ≥ 480 (High risk for cardiovascular event)	9/30/2013
Olanzapine	OLANZ	89416	Reference Range: 20 - 80 ng/mL Days Performed: Wednesday, Saturday Reported: 2 - 6 days	11/18/2013
Pancreatitis Panel	PANCPL	83724	Specimen Requirement: 4 mL whole blood in an EDTA lavender top tube; A completed and clinician signed Ambry General Test Requisition form is required for this testing; This form is available by calling Client Services at 800.628.6816 or 216.444.5755; Ambient	12/12/2013
Perphenazine	PRPHEN	79204	Reference Range: 0.6 - 2.4 ng/mL	11/18/2013
Pneumococcal IgG Antibodies, 14 Serotypes	PNEUMG	88283	<b>Test Name:</b> Previously Pneumococcal IgG Antibodies <b>Includes:</b> Serotype 1, Serotype 3, Serotype 4, <b>Serotype 5</b> , Serotype 6B, Serotype 7F, Serotype 8, Serotype 9N, Serotype 9V, Serotype 12F, Serotype 14, Serotype 18C, Serotype 19F, Serotype 23F Test build will need to be modified	12/31/2013
			Specimen Requirement: 1.5 mL serum from a serum separator tube; Separate serum from cells ASAP or within 2 hours of collection; Refrigerated Reference Range: S pneumoniae IgG Serotype 5: Not established Ranges for all other components are unchanged Days Performed: Sunday - Saturday Reported: 2 - 3 days	
Propafenone	PROPAF	76140	Days Performed: Tuesday, Thursday, Saturday Reported: 2 - 6 days CPT: 80299	11/18/2013
Protriptyline	PROTRI	84205	Days Performed: Monday, Wednesday, Friday Reported: 2 - 6 days	11/18/2013
Selenium, Plasma	PSELEN	82905	Specimen Requirement: 2 mL plasma from an EDTA navy blue top tube; Do not use plasma separator tubes; Separate plasma from cells ASAP or within 6 hours of collection, and aliquot into trace metal free transport tubes (ARUP #43116); Tubes are available by calling Client Services at 800.628.6816 or 216.444.5755; Ambient	12/5/2013
Somatostatin	SOMATO	76232	Special Information: Test build may need to be modified, This test is not approved for New York patient testing.  Reference Range: ≤ 30 pg/mL  Days Performed: 1 day per week  Reported: 7 - 14 days	11/18/2013
Testosterone, Free/Total, Males by ED/LC-MS-MS	FTTESM	89286	Specimen Requirement: 1 mL serum from a serum separator tube; Collect between 6 - 10 am. Separate serum from cells ASAP or within 2 hours of collection. Frozen  Days Performed: Sunday, Tuesday, Friday  Reported: 2 - 7 days	11/18/2013

Test Name	Order Code	Billing Code	Change	Effective Date
Thiocyanate, Urine Random	UTHIOC	79240	Days Performed: Monday, Friday Reported: 2 - 6 days	11/18/2013
Trazodone	DESRYL	75526	Reference Range: Therapeutic: $0.65 - 1.50 \ \mu \text{g/mL}$	11/18/2013
Trichomonas Prep	TRICHO	77786	The changes listed in the October Technical Update for this test have been delayed due to circumstances beyond our control.	To be determined
Tricyclic Antidepressant ID	TAID	89249	Reference Range: Amitriptyline: Not Established Nortriptyline: 50 - 150 ng/mL Total Amitriptyline + Nortriptyline: 95 - 250 ng/mL Imipramine: Not Established Desipramine: 100 - 300 ng/mL Total Imipramine + Desipramine: 150 - 300 ng/mL Doxepin: Not Established Nordoxepin: Not Established Total Doxepin + Nordoxepin: 100 - 300 ng/mL Protriptyline: 70 - 240 ng/mL Clomipramine: Not Established Norclomipramine: Not Established Total Clomipramine: Not Established Total Clomipramine + Norclomipramine: 220 - 500 ng/mL	11/18/2013
Tryptase	TRYPT	80411	Specimen Requirement: 0.5 mL serum from a serum separator tube; Refrigerated Reference Range: 1.0 - 11.0 µg/L Days Performed: Tuesday, Friday Reported: 1 - 5 days	12/26/2013
Vitamin C	VITC	82180	Specimen Requirement: 0.5 mL plasma from a sodium or lithium heparin green top tube; Place specimen on ice immediately after collection; Centrifuge ASAP or within 1 hour of collection; Protect from light; Critical frozen Methodology: High Performance Liquid Chromatography (HPLC) Reference Range: 23 - 114 $\mu$ mol/L Days Performed: Sunday, Tuesday - Saturday Reported: 2 - 8 days	11/18/2013

#### **New Tests**

Test Name	Order Code	Billing Code	Test Information	Effective Date
11-Deoxycorticosterone Quant, Serum/Plasma	11DCOR	89747	<b>Specimen Requirement:</b> 1 mL serum from a serum separator tube; Refrigerated	12/12/2013
			<b>Methodology:</b> Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS)	
			Reference Range:  Premature (26 - 28 weeks): 20 - 105 ng/dL  Premature (29 - 30 weeks): Not established  Premature (31 - 36 weeks): 28 - 78 ng/dL  Full Term Newborn: Elevated at birth;  decreases to 7 - 49 ng/dL during first week  1 - 11 months: 7- 49 ng/dL  Prepubertal children: ≤ 34 ng/dL  Adults: ≤ 19 ng/dL	
			Days Performed: Sunday - Saturday	
			Reported: 2 - 5 days	
			<b>CPT:</b> 82633	
			Price: \$99.00 (non-discountable)	

Test Name	Order Code	Billing Code	Test Information	Effective Date
Chlorpromazine, Quant	CLORPR	75523	<b>Specimen Requirement:</b> 2 mL serum from a serum separator tube; Draw trough specimen before the next dose at steady state concentration; Remove serum from cells ASAP or within 2 hours of collection; Frozen	11/21/2013
			<b>Methodology:</b> Quantitative Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS)	
			Reference Range: Child (0 - $11$ years): 30 - 80 ng/mL Adult ( $\geq 12$ years): 50 - 300 ng/mL	
			Days Performed: Monday, Thursday	
			Reported: 2 - 6 days	
			<b>CPT:</b> 84022	
			Price: \$109.00 (non-discountable)	
Chromosome Breakage for Fanconi Anemia	CBREAK	89734	Special Information: The performing laboratory requests that specimens are collected on specific days only because they have greater success with the assay if the specimen is no more than 2 days old when the culture is set up. If the sample must be collected on a Tuesday, please note that it will be greater than 2 days old when the culture is set up, meaning that if the assay were to fail it could possibly be due to the age of the specimen. Also a specimen with a very low white count could also cause the assay to fail.	12/5/2013
			Specimen Requirement: 5 mL whole blood in a sodium heparin green top tube; Collect Monday or Wednesday only; Specimen MUST be received at Cleveland Clinic Laboratories by noon on Thursdays; Patient information form, available through Client Services at 216.444.5755 or 800.628.6816, must accompany the specimen; Ambient	
			<b>Methodology:</b> Stress test induced by mitomycin C (MMC) or diepoxybutane (DEB)	
			Reference Range: Refer to report	
			Days Performed: Tuesday, Friday	
			Reported: 11- 12 days	
			<b>CPT</b> : 88249, 88230	
			Price: \$1,500.00 (non-discountable)	
Cobalt, Blood	COBALB	89744	Specimen Requirement: 7 mL whole blood in an EDTA navy blue top tube; Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, mineral, and non-essential over the counter medication (upon the advice of their physician); Ambient	12/5/2013
			Methodology: Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)	
			Reference Range: $0.5$ - $3.9 \mu g/L$	
			Days Performed: Tuesday, Friday	
			Reported: 2 - 6 days	
			<b>CPT:</b> 83018	
			Price: \$70.00 (non-discountable)	

Test Name	Order Code	Billing Code	Test Information	Effective Date
Direct Sperm Antibody, IgA and IgG	SPABAG	89753	Includes: Sperm IgA Sperm IgG IgA %binding IgA area of involvement IgG %binding IgG area of involvement Specimen Requirement: Seminal fluid in a sterile container; Frozen	12/4/2013
			Methodology: Mixed Antiglobulin Reaction (MAR)	
			Reference Range:  Sperm IgA: The diagnosis of immunological infertility is suspected when 10-39% of the motile spermatozoa are attached to latex particles. If 40% or more of the spermatozoa are attached, immunological infertility is highly probable.  Sperm IgG: The diagnosis of immunological infertility is suspected when 10-39% of the motile spermatozoa are attached to latex particles. If 40% or more of the spermatozoa are attached, immunological infertility is highly probable.  IgA %binding: Not determined IgA area of involvement: Not determined IgG %binding: Not determined IgG area of involvement: Not determined	
			Days Performed: 5 days per week	
			Reported: 1 week	
			CPT: 89325x2	
Fatty Acids, Free (Non-Esterified)	FFA	89745	Price: \$590.00 (non-discountable)  Special Information: Grossly hemolyzed and lipemic specimens will be rejected. Any specimen containing heparin is unsuitable for analysis, therefore, this test is not suitable for patients on heparin therapy.	12/12/2013
			<b>Specimen Requirement:</b> 2 mL serum from a serum separator tube; Patient should fast 12 hours prior to specimen collection; Separate serum from cells and freeze ASAP; Frozen	
			Methodology: Enzymatic	
			Reference Range: < 30 days: < 2.30 mmol/L ≥ 30 days - < 365 days: 0.5 - 1.6 mmol/L ≥ 1 year - < 8 years: 0.6 - 1.5 mmol/L ≥ 8 years - < 18 years: 0.2 - 1.1 mmol/L ≥ 18 years: 0.07 - 0.88 mmol/L	
			Days Performed: Wednesday	
			Reported: 2 - 9 days	
			CPT: 82725	
FISH for Acute Myeloid Leukemia	FAMLPN	89722	Price: \$55.00 (non-discountable)  Includes: FISH for (8;21) Translocation for AML FISH for MLL FISH for CBFB/MYH11 FISH for PML/RARA	10/15/2013
			Specimen Requirement:  5 mL whole blood in an EDTA lavender top tube; Refrigerated *OR*  5 mL bone marrow in an EDTA lavender top tube; Refrigerated *OR*  5 mL bone marrow in a sodium heparin green top tube; Refrigerated *OR*  5 mL whole blood in a sodium heparin green top tube; Refrigerated *OR*	
			Methodology: Fluorescent In-Situ Hybridization (FISH)	
			Days Performed: 3 days per week Reported: 7 days	
			CPT: 88368x8	
			Price: \$3,232.00 (non-discountable)	
			45,202.00 (11011 410004114010)	

Test Name	Order Code	Billing Code	Test Information	Effective Date
FISH for B Lymphoblastic Leukemia	FSHBLL	89721	Includes: FISH for BCR/ABL FISH for MLL FISH for t(12;21)(p13q;22) FISH for Trisomy 4, 10, 17  Specimen Requirement: 5 mL whole blood in an EDTA lavender top tube; Refrigerated *OR* 5 mL bone marrow in an EDTA lavender top tube; Refrigerated *OR* 5 mL bone marrow in a sodium heparin green top tube; Refrigerated *OR* 5 mL whole blood in a sodium heparin green top tube; Refrigerated *OR* 5 mL whole blood in a sodium heparin green top tube; Refrigerated Methodology: Fluorescent In-Situ Hybridization (FISH)	10/15/2013
			Days Performed: 3 days per week  Reported: 7 days  CPT: 88368x9  Price: \$3,674.00 (non-discountable)	
Fluvoxamine, Serum & Plasma	FLUVOX	89728	Specimen Requirement: 3 mL serum from a red top tube; Do not use serum separator tubes; Refrigerated  Methodology: Gas Chromatography Reference Range: Refer to report  Days Performed: Varies Reported: 4 - 11 days  CPT: 80299  Price: \$150.00 (non-discountable)	11/21/2013
Giardia Antigen, Stool, EIA	GIAEIA	89735	Specimen Requirement:10 grams stool in a sterile container; Within 30 minutes of collection, transfer enough stool into Cary-Blair media to reach the fill line; Mix contents thoroughly until homogenous; Refrigerated  Methodology: Enzyme Immunoassay (EIA)  Reference Range: Not detected  Days Performed: 3 days per week  Reported: 4 - 7 days  CPT: 87329  Price: \$45.00 (non-discountable)	11/26/2013
Hepatitis Delta Antigen	HDVAG	77113	Specimen Requirement: 1 mL serum from a red top tube; Remove serum from cells within one hour of collection and immediately freeze; Transport Frozen  Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)  Reference Range: Refer to report  Days Performed: Varies  Reported: 4 - 10 days  CPT: 87380  Price: \$170.00 (non-discountable)	11/21/2013
Hepatitis E Antibody IgG	HEPIGG	89754	Specimen Requirement: 0.5 mL serum from a serum separator tube; Refrigerated  Methodology: Enzyme Linked Immunosorbent Assay (ELISA)  Reference Range: Not detected  Days Performed: Monday, Thursday  Reported: 2 - 6 days  CPT: 86790  Price: \$99.00 (non-discountable)	12/12/2013

Test Name	Order Code	Billing Cod	Test Information	Effective Date
Hepatitis E Antibody IgM	HEPIGM	89755	<b>Specimen Requirement:</b> 0.5 mL serum from a serum separator tube; Refrigerated	12/12/2013
			Methodology: Enzyme Linked Immunosorbent Assay (ELISA)	
			Reference Range: Not detected	
			Days Performed: Monday, Thursday  Reported: 2 - 6 days	
			CPT: 86790	
			Price: \$99.00 (non-discountable)	
Histamine, Plasma	PHISTA	89746	Specimen Requirement: 1 mL plasma from a pre-chilled EDTA lavender top tube; Place on ice after collection; Within 20 minutes of collection, centrifuge in a refrigerated centrifuge, aliquot, and freeze immediately; Transport Frozen	12/5/2013
			Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)	
			Reference Range: 0 - 8 nmol/L	
			Days Performed: Tuesday, Saturday	
			<b>Reported:</b> 2 - 7 days <b>CPT:</b> 83088	
			Price: \$70.00 (non-discountable)	
Melatonin	MELAT	89730	Special Information: Research Use Only	11/21/2013
			<b>Specimen Requirement:</b> 2 mL serum from a red top tube; Do not use serum separator tubes; Allow specimen to clot for 15 - 20 minutes at room temperature and then centrifuge ASAP or within 2 hours of collection; Frozen	
			Methodology: Radioimmunoassay (RIA)	
			Reference Range: Refer to report	
			Days Performed: Wednesday	
			<b>Reported:</b> 3 - 11 days <b>CPT:</b> 83519	
			Price: \$165.00 (non-discountable)	
MYD88 L265P Mutation Analysis	MYD88	89733	Specimen Requirement: 10 mL whole blood in an EDTA lavender top tube; Refrigerated	11/26/2013
			Methodology: Polymerase Chain Reaction, Capillary Electrophoresis	
			Days Performed: Monday - Friday	
			Reported: 1 - 2 weeks	
			CPT: 81479x2	
Desired by Letest	IDDOIN	70006	Price: \$690.00 (non-discountable)	11/10/0012
Proinsulin, Intact	IPROIN	79206	Specimen Requirement: 1 mL serum from a serum separator tube; Separate serum from cells ASAP or within 2 hours of collection, aliquot, and immediately freeze; Transport Frozen	11/18/2013
			Methodology: Chemiluminescence Immunoassay (CLIA)	
			Reference Range: 0 - 17 years: Not established ≥ 18 years: ≤ 28.9 pmol/L	
			Days Performed: Tuesday, Thursday	
			Reported: 2 - 7 days	
			CPT: 84206	
			<b>Price:</b> \$117.00	
Titanium, Serum or Plasma	TITAN	89725	Specimen Requirement: 2 mL plasma from an EDTA navy blue top tube; Separate plasma from cells within 2 hours of collection; Transfer plasma into a trace metal free transport tube (ARUP #43116). Tubes are available by calling Client Services at 800.628.6816 or 216.444.5755; Refrigerated	11/21/2013
			Methodology: Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)	
			Reference Range: Refer to report	
			Days Performed: Varies	
			<b>Reported:</b> 4 - 11 days <b>CPT:</b> 83018	
			Price: \$167.00 (non-discountable)	
			\$107.00 (non alcountable)	

Test Name	Order Code	Billing Code	Test Information	Effective Date
Vanillylmandelic Acid, Urine	UVMA3 80050	80050	Includes:  VMA - per 24 hour  VMA - per volume  Creatinine - per 24 hour  Creatinine - per volume	12/9/2013
			Special Information: The VMA-to-creatinine ratio will be reported when the patient is under 18 years, the urine collection is random or other than 24 hours, or the urine volume is less than 400 mL/24 hours. VanillyImandelic acid (VMA) results are expressed as a ratio to creatinine excretion (mg/g cr). VMA mass per day (mg/d) is not reported on specimens from patients younger than 18 years of age, for random specimens, urine collection periods other than 24 hours, or for urine volumes less than 400 mL/d. No reference interval is available for results reported in units of mg/L. Medications that may interfere with catecholamines and their metabolites include amphetamines and amphetamine-like compounds, appetite suppressants, bromocriptine, buspirone, caffeine, chlorpromazine, clonidine, disulfiram, diuretics (in doses sufficient to deplete sodium), epinephrine, glucagon, guanethidine, histamine, hydrazine derivatives, imipramine, levodopa (L-dopa, Sinemet®), lithium, MAO inhibitors, melatonin, methyldopa (Aldomet®), morphine, nitroglycerin, nose drops, propafenone (Rythmol), adiographic agents, rauwolfia alkaloids (Reserpine), tricyclic antidepressants, and vasodilators. The effects of some drugs on catecholamine metabolite results may not be predictable.	
			<b>Specimen Requirement:</b> 4 mL urine in a clean container from a well-mixed 24 hour collection; Refrigerate during collection; Abstain from medications for 72 hours prior to collection; Refrigerated	
			Methodology: High Performance Liquid Chromatography (HPLC)	
			Reference Range:  VMA, Urine: ≥ 18 years: 0.0 - 7.0 mg/d  VMA, Urine: 0 - 2 years: 0 - 27 mg/g crt  3 - 5 years: 0 - 13 mg/g crt  6 - 17 years: 0 - 9 mg/g crt  ≥ 18 years: 0 - 6 mg/g crt  Creatinine: ≥ 3 years: Refer to report	
			Days Performed: Sunday, Tuesday - Saturday	
			Reported: 2 - 5 days	
			<b>CPT:</b> 84585	
			<b>Price:</b> \$135.00	

#### **Discontinued Tests**

Test Name	Order Code	Billing Code	Test Information	Effective Date
NS6S Antibody Test	NS6S	89214	This test will no longer be available due to reagent unavailability.	11/26/2013
Proinsulin	PROINS	79206	This test will no longer be available. Suggest ordering Proinsulin, Intact (IPROIN).	11/18/2013
Steroid Panel 1	STROID	82912	This test will no longer be available.	11/18/2013
Vanillylmandelic Acid, Urine	UVMA2	80050	This test will no longer be available. Suggest ordering VanillyImandelic Acid, Urine (UVMA3).	12/9/2013