ACL Laboratories
Every Sample is a Life™

Test Bulletin

February 2017

Did You Know...

Laboratory Testing for Vitamin D

Vitamin D is a fat-soluble vitamin that plays a significant role in calcium metabolism and promoting bone metabolism. Vitamin D deficiency has been associated with poor bone metabolism, osteoporosis, osteomalacia, muscle fatigue, autoimmune disease, heart disease, and cancer risk.

Vitamin D3 (Cholecalciferol) is ingested through the consumption of fish and meat. Vitamin D3 is also synthesized in human skin by exposure to UV light (sunlight). Once Vitamin D enters the circulation it is rapidly converted to 25-hydroxy Vitamin D3 by the liver. A small amount of 25-OH Vitamin D3 is converted in the kidneys, under the control of parathyroid hormone to 1,25 Dihydroxy Vitamin D, which is the bioactive hormone. This form directs calcium reabsorption from the small intestine and reabsorption from bones. Vitamin D2 (Ergocalciferol), commonly derived from plants and fungus, is the form most commonly found in over the counter supplements. Vitamin D2 undergoes similar metabolism and is biologically equivalent to Vitamin D3.

Current recommendations do NOT support regular screening for Vitamin D in healthy patients. Screening should be limited to higher risk patients including those with osteoporosis, chronic kidney disease, malabsorption, some infections, and obesity. Monitoring of Vitamin D status is also useful for evaluating treatment efficacy in these patients receiving Vitamin D supplementation. Measurement of 25-OH Vitamin D (25VDR) is the best indicator of Vitamin D status and in most cases is the appropriate test to order. This assay measures both Vitamin D2 and D3 stores.

There are rare instances when 1,25-OH Vitamin D (125VDR) may provide additional information, but the test is NOT appropriate for diagnosing Vitamin D deficiency. Measurement of 1,25-Dihydroxy Vitamin D levels should be limited to patients with chronic renal failure and investigating unexplained hyperparathyroidism in patients with adequate levels of 25-hydroxy Vitamin D.

The clinical utility of 25-Dihydroxy Vitamin D2 and D3 (D2D3) is limited and should not be routinely measured. In some instances it can be used as an alternative test for monitoring individuals who are not responding to Vitamin D2 supplementation. This can be important for this patient population since Vitamin D2 has a greater potential for toxicity than Vitamin D3 supplementation.

ACL Vitamin D related tests include:

Test Description	ACL Test Order Code	Comments
Vitamin D, 25-Hydroxy	25VDR	Preferred test for screening high risk patients for Vitamin D deficiency and monitoring supplementation
Vitamin D, 1,25 Dihydroxy	125VDR	Evaluate calcium metabolism in individuals with renal failure or hypercalcemia
25-Hydroxyvitamin D2 and D3-CCL (Vitamin D2D3, 25-Hydroxy)	D2D3	Alternative test to monitor individuals who are not responding to supplementation

ACL Standardizes Flow Cytometry Requisition Form and Adds New Ask at Order Entry Questions

ACL Laboratories created a new standardized requisition form to accompany specimens sent for Flow Cytometry testing. A copy of the ACL Flow Cytometry requisition form can be obtained by clicking on the link found under the following tests in ACL's Directory of Services: TXALLP, TXCLLP, TXLYMP, TXMYLS, TXFBP and TXPNH (http://www.acllaboratories.com/test-catalog/). The requisition has transport instructions and spaces to provide specimen source information.

All electronic orders will now include two new "ask at order entry" questions one for Specimen Type and one for Specimen Source. The Specimen Type question will include a list of specimen types to choose from, such as: Blood, CSF, Body Fluid, Bone Marrow, and Tissue. The Specimen Source should be entered for the Flow Source question. For example, a specimen source for a tissue sample could be "left tonsil"; for a bone marrow sample the source could be "right posterior iliac". For blood and CSF specimens, enter "NA" as the source.

There will be no change in where samples are sent and performed. Illinois sites will send their samples to Advocate Lutheran General Hospital and Wisconsin sites will send their specimens to Aurora St. Luke's Medical Center.

It is recommended that sites discard any old copies of requisitions on hand and start using this standardized form immediately. For any questions, contact the Illinois Flow Cytometry laboratory at Lutheran General Hospital at 847.723.7537 or the Wisconsin Flow Cytometry laboratory at St. Luke's at 414.649.7859.

Random and 24-hr Urine Protein Electrophoresis Testing Update

ACL Laboratories offers two urine electrophoresis codes:

- Protein Electrophoresis Monoclonal, Urine Random (Test Order Code UMERMX)
- Protein Electrophoresis Monoclonal, Urine 24-hour (Test Order Code UMETMX)

Both of these urine electrophoresis order codes include a urine total protein, urine protein electrophoresis and a qualitative urine immunoelectrophoresis. ACL performs this testing Monday through Friday with a final result within 3 days.

Effective Wednesday, February 22, 2017, ACL will discontinue Bence Jones Protein, Urine (Test Order Code UBJP). This reference laboratory test order code is the same as the tests ACL performs and includes a quantitative urine free kappa and lambda light chains.

In place of the Bence Jones Protein, Urine (Test Order Code UBJP), please order either:

- Protein Electrophoresis Monoclonal, Urine Random (Test Order Code UMERMX) or
- Protein Electrophoresis Monoclonal, Urine 24-hour (Test Order Code UMETMX)

If a quantitative urine free kappa and lambda light chain is needed, order the referral test Free Kappa/Lambda Light Chains Urine (Test Order Code UKLFR). This test is a latex-enhanced, immunoassay that provides ultrasensitive detection and quantitation of free light chains (FLCs) in serum or urine earlier than electrophoresis. This test aids in the diagnosis and treatment of multiple myeloma, lymphocytic neoplasms, Waldenstroms macroglobulinemia, and connective tissue diseases, such as systemic lupus erythematosus.

Pediatric Reference Ranges, Chemistry

Effective Wednesday, February 22, 2017, the third and final group of chemistry related pediatric reference updates will be implemented. These changes are the result of the extensive review of age specific reference ranges of chemistry analytes that was done using one year of ACL generated data. The data was compared to a study done by Dr. Patti Jones, Director, Children's Medical Center Dallas, Texas (who did an extensive pediatric reference range study using the same Siemens methodology as ACL uses). Numerous other references were also utilized, such as that from our vendors (Siemens and Beckman), publications from Clinical Chemistry and Clinical Biochemistry, the National Cholesterol Education Program (NCEP) Expert Panel on Cholesterol Levels in Children, and the Lipid Research Clinics Prevalence Study. Proposed reference ranges were determined and then reviewed for feedback by physician specialists within Aurora Health Care and Advocate Health Care.

Due to the changes in pediatric reference ranges, some changes were also made to the Critical values as well. See the chart below.

The first round of changes was made December 14, 2016 and the second round on January 18, 2017. See the December and January ACL Test Bulletins for further details. This is the final group of changes related to pediatric reference ranges.

Reference Range Changes

Test Order Code	Test Name, Units	Current Age Range	Current Reference Range	New Age Range	New Reference Range
BUN, 5BUN	Blood Urea Nitrogen, mg/dL	0 up to 29 days	0-25	0 up to 1 year	5-19
BUN, 5BUN		29 days and up	10-20	1 year up to 14 years	5-18
BUN, 5BUN				14 years and up	6-20
CL, 5CL, RCL	Chloride, mmol/L	All	98-107	0 up to 7 days	97-110
CL, 5CL, RCL				7 days and up	98-107
CREA, 5CREA, ISCR	Creatinine, mg/dL	0 up to 5 years	0.15-0.55	0 up to 1 week	M: 0.33-0.97 F: 0.31-1.03
CREA, 5CREA, ISCR		5 years up to 9 years	M: 0.25-0.75 F: 0.25-0.65	1 week up to 2 years	M: 0.16-0.59 F: 0.16-0.42
CREA, 5CREA, ISCR		9 years up to 10 years	0.35-0.85	2 years up to 10 years	M: 0.21-0.70 F: 0.21-0.65
CREA, 5CREA, ISCR		10 years and up	M: 0.67-1.17 F: 0.51-0.95	10 years up to 18 years	M: 0.38-1.15 F: 0.39-0.90
CREA, 5CREA, ISCR				18 years and up	M: 0.67-1.17 F: 0.51-0.95
GLU, 5GLU, RGLUC, 5GLUB	Glucose, mg/dL	0 up to 2 days	40-100	0 up to 1 day	M: 36-110 F: 36-89
GLU, 5GLU, RGLUC, 5GLUB		2 days up to 5 days	45-100	1 day up to 7 days	47-110
GLU, 5GLU, RGLUC, 5GLUB		5 days up to 7 days	60-110	7 days up to 28 days	54-117
GLU, 5GLU, RGLUC, 5GLUB		7 days and up	65-99	28 days and up	65-99

Test Order Code	Test Name, Units	Current Age Range	Current Reference Range	New Age Range	New Reference Range
GOT	SGOT/AST, Units/L	0 up to 6 days	35-140	0 up to 5 days	35-140
GOT		6 days up to 2 years	23-65	5 days up to 1 year	10-80
GOT		2 years up to 8 years	23-25	1 year up to 9 years	10-55
GOT		8 years up to 10 years	16-46	9 years up to 18 years	10-45
GOT		10 years up to 17 years	10-40	18 years and up	<38
GOT		17 years and up	<38		
K, 5K, RK	Potassium, mmol/L	0 up to 28 days	3.5-5.5	0 up to 1 year	3.5-6.0
K, 5K, RK		28 days and up	3.4-5.1	1 year and up	3.4-5.1
K, 5K, RK					
NA, 5NA, RNA	Sodium, mmol/L	0 up to 28 days	130-145	All ages	135-145
NA, 5NA, RNA		28 days and up	135-145		
QIGA	Quantitative Immunoglobulin A, mg/dL	0 up to 1 day	1-4	0 up to 1 month	<95
QIGA		1 day up to 3 months	1-53	1 month up to 4 months	<131
QIGA		3 months up to 6 months	5-46	4 months up to 1 year	10-129
QIGA		6 months up to 9 months	8-67	1 year up to 2 years	19-175
QIGA		9 months up to 1 year	11-89	2 years up to 3 years	22-220
QIGA		1 year up to 2 years	16-83	3 years up to 4 years	48-345
QIGA		2 years up to 3 years	14-122	4 years up to 5 years	61-345
QIGA		3 years up to 4 years	22-157	5 years up to 6 years	43-253
QIGA		4 years up to 6 years	25-152	6 years up to 7 years	41-297
QIGA		6 years up to 9 years	33-200	7 years up to 10 years	51-297
QIGA		9 years up to 10 years	45-234	10 years up to 13 years	44-395
QIGA		10 years and up	68-378	13 years up to 19 years	44-441
QIGA				19 years and up	82-453
QIGG	Quantitative Immunoglobulin G, mg/dL	0 up to 1 day	611-1542	0 up to 3 months	250-1200
QIGG		1 day up to 3 months	241-870	3 months up to 2 years	286-1680
QIGG		3 months up to 6 months	169-558	2 years up to 4 years	341-1960

Test Order Code	Test Name, Units	Current Age Range	Current Reference Range	New Age Range	New Reference Range
QIGG		6 months up to 9 months	206-676	4 years up to 19 years	528-2190
QIGG		9 months up to 1 year	208-868	19 years and up	751-1560
QIGG		1 year up to 2 years	282-1026		
QIGG		2 years up to 3 years	407-1009		
QIGG		3 years up to 4 years	423-1090		
QIGG		4 years up to 6 years	444-1187		
QIGG		6 years up to 9 years	608-1229		
QIGG		9 years up to 10 years	584-1509		
QIGG		10 years and up	694-1618		
QIGM	Quantitative Immunoglobulin M, mg/dL	0 up to 1 day	6-24	0 up to 2 months	19-193
QIGM		1 day up to 3 months	19-83	2 months up to 1 year	21-192
QIGM		3 months up to 6 months	23-85	1 year up to 4 years	43-163
QIGM		6 months up to 9 months	33-97	4 years up to 19 years	48-226
QIGM		9 months up to 1 year	32-120	19 years and up	46-304
QIGM		1 year up to 2 years	39-142		
QIGM		2 years up to 3 years	47-160		
QIGM		3 years up to 4 years	45-190		
QIGM		4 years up to 6 years	41-186		
QIGM		6 years up to 9 years	47-197		
QIGM		9 years up to 10 years	49-230		
QIGM		10 years and up	53-334		
URIC	Uric Acid, mg/dL	M: 0 up to 3 years F: 0 up to 3 years	M: 2.0-7.0 F: 2.0-7.0	0 up to 1 year	1.2-7.3
URIC		M: 3 years up to 11 years F: 3 years up to 11 years	M: 2.0-6.5 F: 2.0-6.5	1 year up to 10 years	1.2-4.5
URIC		M: 11 years up to 15 years F: 11 years up to 15 years	M: 2.0-7.0 F: 2.0-7.0	10 years up to 18 years	M: 2.9-7.9 F:2.4-6.9
URIC		M: 15 years up to 20 years F: 15 years up to 20 years	M: 3.0-7.2 F: 2.0-6.0	18 years and up	M: 3.5-7.2 F: 2.6-5.9
URIC		M: 20 years and up F: 20 years and up	M: 3.5-7.2 F: 2.6-5.0		

Critical Value Changes

Test Code	Test Name, Units	Current Age Range	Current Critical Value	New Age Range	New Critical Value
GLU, 5GLU, RGLUC, 5GLUB	Glucose, mg/dL	0 up to 2 days	< 40 or >200	0 up to 1 day	<36 or >200
GLU, 5GLU, RGLUC, 5GLUB		2 days up to 5 days	<45 or >200	1 day up to 7 days	<45 or >200
GLU, 5GLU, RGLUC, 5GLUB		5 days up to 7days	<45 or >200	7 days up to 28 days	<50 or >200
GLU, 5GLU, RGLUC, 5GLUB		7 days up to 28 days	<45 or >200	28 days and up	<50 or >450
GLU, 5GLU, RGLUC, 5GLUB		28 days and up	<50 or >450		
K, 5K, RK	Potassium, mmol/L	0 up to 28 days	<2.5 or >8.0	0 up to 28 days	<2.5 or >6.0
K, 5K, RK		28 days and up	<2.8 or >6.2	28 days up to 1 year	<2.8 or >6.2
K, 5K, RK				1 year and up	<2.8 or >6.2
NA, 5NA, RNA	Sodium, mmol/L	0 up to 28 days	<120 or >160	0 up to 28 days	<128 or >160
NA, 5NA, RNA		28 days and up	<120 or >160	28 days and up	<120 or >160
URIC	Uric Acid, mg/dL	All ages	>15.0	All ages	No Critical Value*

*Test does not meet definition of "critical value" – A result that suggests the patient is in imminent danger and prompt intervention/therapy can remedy that imminent danger.

Modification of Sample Requirements for Norovirus GI/GII ACL Test Order Code NORVRS

Effective Wednesday, February 22, 2017, ACL Laboratories will change the sample requirements for the existing Test Order Code **NORVRS**.

Below is a list of changes:
1. Stool sample collected in Cary-Blair (Para-Pak C&S)
2. Transport: Ambient
3. Added multi-language collection instruction to Test Order Code NORVRS in ACL's Directory of Services
4. Throat swab, rectal swab or ESwab are ***no longer acceptable*** specimen types

Para-Pak SAF Fixative (yellow top) is **not acceptable for PCR based test.**

If you have questions, please contact any of the following:
ACL Molecular Pathology Laboratory – ACL Illinois Central Laboratory – 847.349.7182
Michael Mihalov, MD – Medical Director – 847.349.7401
Lech Mazur, MS – Technical Director – 847.349.7185
Eric Beck, PhD – Technical Director of Microbiology Laboratory – ACL Wisconsin Central Laboratory – 414.328.6124

Cortisol Test Codes

Effective Wednesday, February 22, 2017, ACL Laboratories will implement AM and PM Cortisol test order codes. See the chart below.

Test Order Code	Test Name	Draw Time	Reference Range
CORAM	Cortisol, AM	0800 (plus or minus one hour)	5.2 – 22.5 mcg/dL
CORPM	Cortisol, PM	1600 (plus or minus one hour)	3.4 – 16.8 mcg/dL

The current "random" cortisol Test Order Code CORT will remain active with a reference range of 3.4-22.5 mcg/dL.

Please note that the level of cortisol in the blood normally rises and falls in a "diurnal variation" pattern. Cortisol peaks early in the morning, 30 minutes after awakening, then declines throughout the day, reaching its lowest level about midnight. This pattern can change when a person works irregular shifts (such as the night shift) or sleeps at different times of the day. It can also become disrupted when a disease or condition either limits or stimulates cortisol production.

New Referral Testing Order Codes

Test Description	Current Test Order Code	New Test Order Code	Specimen Type	Preferred Volume	Tube Type	Temperature to Transport	Note/Comments
Complement Deficiency Assay	COMPDF	COMPD	Serum	1.0 mL	Red (No Additive)	Frozen	Specimen must clot at room temperature for one hour. Centrifuge, then remove serum and freeze.
Testosterone, Free and Total – Male	FTESTO	TSTFMR	Serum	1.0 mL	Gold Gel	Frozen	Collect specimen between 6 and 10 a.m.
Alkaline Phosphatase Isoenzymes	ALKISO	ALKIS	Serum	2.0 mL	Gold Gel	Frozen	Overnight fasting is preferred. Age and Sex of patients are required for interpretation of results.

Lipid Reference Range Updates

On Wednesday, January 18, 2017, reference ranges for multiple tests were updated. To align with these updates, some changes were made in the definition of age breaks and related reference ranges for lipid testing, which included changes in the cutoff levels for flagging abnormal results. The interpretive charts that append to lipid panels remain the same.

ACL lipid reference range changes were made to align with the National Cholesterol Education Program (NCEP) Expert Panel on Cholesterol Levels in Children and the Lipid Research Clinics Prevalence Study.

Test Order Code	Test Name, Units	Current Age Range	Current Reference Range	New Age Range	New Reference Range
CHOL	Cholesterol mg/dL	0 up to 18 years	100-170	0 up to 20 years	<170
CHOL		18 years and up	100-200	20 years up to 25 years	<190
CHOL				25 years and up	<200
HDL	HDL Cholesterol mg/dL	ALL	>39	0 up to 25 years	>45
HDL				25 years and up	>59
LDL	LDL Cholesterol mg/dL	ALL	<130	0 up to 20 years	<110
LDL				20 years up to 25 years	<120
LDL				25 years and up	<130
NONHDL	Non-HDL Cholesterol mg/dL	ALL	[none]	0 up to 20 years	<120
NONHDL				20 years up to 25 years	<150
NONHDL				25 years and up	[none]
TRIG	Triglycerides mg/dL	ALL	<150	0 up to 10 years	<75
TRIG				10 years up to 20 years	<90
TRIG				20 years up to 25 years	<115
TRIG				25 years and up	<150

New Requisition Form for Sequential Screening Test at NTD Labs

NTD Labs has created a new Universal Prenatal Screening Requisition Form that allows the user to order any prenatal screening test that ACL Laboratories offers through NTD Labs regardless of specimen type. Included on the new requisition are three peel-away specimen labels, to be affixed to the specimen tube and/or separate 9QJTM Five Spot Blood Card, depending on the test(s) ordered. Positive patient identification will be ensured with the pre-printed requisition number and full patient name and date of birth that is written on both the requisition and the peel off specimen label.

Instructions:

- Complete the Prenatal Screening Requisition Form, in full, with clear printing.
- Ensure that the patient signs and dates the bottom of the Prenatal Screening Requisition Form.
- Enter the patient's first name, last name, and date of birth on the peel away specimen label(s) ***exactly*** as they appear on the requisition form.
- Collect the appropriate sample(s) for the test(s) ordered.
- Peel off the Specimen Label(s) and place one on each of the specimens to be submitted.

For additional information regarding this test, as well as specimen collection requirements, please visit ACL's Directory of Services at http://www.acllaboratories.com/test-catalog/.

Myoglobin, Urine (Test Order Code UMYOG) Specimen Requirement Update

Effective Immediately, Cleveland Clinic Laboratories has updated the collection requirement for Myoglobin, Urine (Test Order Code UMYOG) to reflect the performing laboratory. The performing laboratory determined that the degradation of urine myoglobin is both pH and time dependent. The sooner the pH is adjusted to 8-9 the better. At pH 5.5, nearly half of the myoglobin disappears in the first 24 hours.

The Myoglobin, Urine (Test Order Code UMYOG) will need to transfer a maximum of 4.0 mL (minimum: 0.5 mL) random urine to an ARUP Standard Transport Tube prefilled with Sodium Carbonate (ARUP Supply 48096 via CCL) immediately after collection. Gently mix ARUP Standard Transport Tube until the Sodium Carbonate is thoroughly distributed. Sodium Carbonate (ARUP Supply 48096 via CCL) is available from ACL Materials Management.

For additional information regarding these test, please contact ACL Client Services at 1.800.877.7016.

Seoul Update

January 31, 2017

The Wisconsin Department of Health Services, Division of Public Health (DPH) has recently reported two confirmed cases of human illness caused by the hantavirus, Seoul virus. Both cases occurred in patients who cared for domestic rats in a rattery in northeastern Wisconsin. The Illinois Department of Public Health has identified six additional cases among Illinois residents who were exposed at ratteries in that state. There is considerable movement of rats between ratteries in Wisconsin and Illinois via sales of breeding stocks.

Seoul virus is an old world hantavirus harbored in rats. Humans are infected following direct exposure to urine, droppings, or saliva from infected rodents or exposure to bedding containing infectious droppings. Seoul virus is not transmitted from person to person and is very rare in the United States.

Individuals who become infected are often asymptomatic or have relatively mild disease, but some may develop hemorrhagic fever with renal syndrome (HFRS), which leads to death in 1 – 2% of patients. Signs and symptoms include fever, severe headache, back pain, abdominal pain, chills, blurred vision, redness of the eyes, rash, hypotension, oliguria, renal failure, and pulmonary edema. Laboratory findings include thrombocytopenia, electrolyte imbalances, azotemia, and proteinuria. Clinicians are advised to ask patients with these symptoms about exposure to pet rats when gathering patient histories.

Symptomatic patients who have been in contact with the implicated rat colonies should have the following tests performed: a CBC (with platelet count), urinalysis, a chemistry panel (with BUN, creatinine, liver transaminase levels), and Seoul virus serology. Asymptomatic patients who have been in contact with the implicated rat colonies should be offered serologic testing for Seoul virus. Finally, any individuals exhibiting symptoms of HFRS and have been in contact with any rats should be considered for serological testing. Hantavirus serology specimens may be submitted to either the Wisconsin or Illinois Departments of Public Health for fee-exempt testing following appropriate pre-approval. To obtain pre-approval, the physician should contact the appropriate public health department and provide the following information:

- Date of rat exposure since 9/1/16
- Nature of rat exposure (e.g. handling, cleaning cage, etc.)
- Names of ratteries/facilities/sources where the rats were obtained
- Information on clinical signs and symptoms

Seoul Update (cont'd)

Testing Performed By	Pre-Approval Contact Number	ACL Test Order Code	ACL Test Description	Specimen Requirements	Order Notes
WI State Lab of Hygiene (WI Residents)	608.267.9003	CREF	Reference Lab Test Miscellaneous	1 Lavender EDTA and 1 Red/Yellow Submit whole blood refrigerated	1) Pre-Approval from WI State Lab of Hygiene (WSLH) required. 2) Following approval, testing requisition will be faxed to provider for completion. 3) Complete WSLH requisition and order CREF test indicating "Hantavirus Serology Testing-WSLH". 4) Submit specimen and completed WSLH test requisition form to ACL Laboratories.
Centers for Disease Control and Prevention (IL Residents)	312.793.4760	CREF	Reference Lab Test Miscellaneous	1 Lavender EDTA and 1 Red/Yellow Submit whole blood refrigerated	1) Pre-Approval from IL Department of Public Health (IDPH) required. 2) Following approval, CDC testing requisition will be faxed to provider for completion. 3) Complete CDC requisition and order CREF test indicating "Hantavirus Serology Diagnostic Testing". 4) Submit specimen and completed CDC test requisition form to ACL Laboratories.

If fee-exempt hantavirus serology testing is not approved by the Wisconsin or Illinois departments of public health, specimens may still be submitted to ACL Laboratories for testing at an alternative reference laboratory. This testing will not be fee-exempt. In addition, routine CBC and urinalysis testing may be performed at ACL Laboratories.

Testing Performed By	ACL Test Order Code	ACL Test Description	Specimen Requirements	Order Notes
ACL Reference Laboratory	HANTAB	Hantavirus IgG and IgM Abs	1 Gold Gel SST Separate serum and submit refrigerated	1) This testing is not fee-exempt. 2) Pre-approval is not required.
ACL Laboratories	UMACR	Urinalysis Chemistry Exam – No Microscopic Exam	1 Red/Yellow top urine preservative tube – ambient	1) This testing is not fee-exempt. 2) Pre-approval is not required.
ACL Laboratories	CBCA	CBC with Automated Differential	1 Lavender EDTA Submit whole blood refrigerated	1) This testing is not fee-exempt. 2) Pre-approval is not required.

For additional information, please contact ACL Client Services at 1.800.877.7016.

BCR/ABL Kinase Domain Mutation Analysis (Test Order Code KINASE) Modification Update

BCR/ABL1, Tyrosine Kinase Inhibitor Resistance, Kinase Domain Mutation Screen, Sanger sequencing (Test Order Code KINASE) has been updated to match the requirements of Cleveland Clinic Laboratories.

The following are now required for KINASE testing and will need to accompany the sample or be answered in the system:

1. BCR/ABL1 fusion type (p210, p190, p205 or p230) to be provided to complete testing.
   - If BCR/ABL1 fusion type (p210, p190, p205 or p230) is not provided, BCR/ABL1 Qualitative, Diagnostic Assay (ABLQUL) will be performed at additional charge.
   - If not detected, KINASE will be credited and referred to ABLQUL result from (specimen collection date and time).
2. A Hematopathology Patient Information form is required along with any available pathology/test reports with the specimen. This is preferred, but not required.

For additional information regarding these tests, as well as specimen collection requirements, please contact Client Services at 1.800.877.7016.

acllaboratories.com Website Maintenance Update – Mid-Late March 2017

If you notice any glitches trying to use our website (acllaboratories.com) next month, rest assured it is not permanent and it is happening for a good cause.

ACL Laboratories will be implementing system upgrades to our website, so we need to restrict access for a 24-48 hour period during timeframe. We don't have a specific date when this will occur at this time. We wanted to give you a "heads up" now in case you have trouble visiting our website mid-late March.

During this maintenance update timeframe, the internet won't know how to route visitors to the updated version of the site. Below is an example of a possible error message that one might expect to see if experiencing difficulty accessing our website.