



# LABORATORY UPDATE

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## Routine Testing

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The CPT Codes provided in this document are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payor being billed. Any Profile/panel component may be ordered separately. Reflex tests are performed at an additional charge.

**Quest Diagnostics Nichols Institute (San Juan Capistrano and Chantilly),  
Focus Diagnostics, Inc. and Specialty Laboratories**

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**CPT Code changes for CPT 2009**

*DLO is pleased to inform you of the following new and updated laboratory testing information:*

***What is Culture, Aerobic bacteria?***

Test code 4550, “Culture, Aerobic bacteria” has an ambiguous name and we would like to take this opportunity to clarify how it should be used.

A wide variety of microorganisms that can reside on skin may produce wound and soft tissue infections. These organisms enter the body through breaks in the skin/mucous membranes, through wounds made by trauma, or as a complication of surgery or by bites. Laboratory diagnosis is best made through the use of aerobic culture with or without the Gram stain. To clarify, test code 4550, Culture, Aerobic bacteria, is for sources **other than** body fluids, deep tissue (other than skin biopsy), catheter tips, respiratory, genital, urine, or stool. It is designed to detect the primary causes of skin and soft tissue infections which primarily include *Staphylococcus aureus*, *Pseudomonas aeruginosa*, members of the *Enterobacteriaceae*, and beta-hemolytic streptococci.

Aerobic culture should not be used alone to detect infections of deep tissue and many body fluids where anaerobic bacteria may be significant. Test code 4446 combines aerobic with anaerobic culture as well as a Gram stain and is designed for this purpose.

**SurePath™ Liquid Based Pap Test with Focal Point™**

**Effective February 2, 2009 specimens submitted for SurePath Liquid Based Cervical Cytology Screening, will be processed using FocalPoint automated cervical cytology screening device when ordered.**

<p><b>Clinical Significance:</b></p>	<p>FocalPoint is an automated cervical cytology screening device intended for use in initial screening of cervical cytology slides. It classifies slides using a high speed video microscope, image interpretation software, and morphology computers to image and analyze the complex images on a cervical cytology slide. The device is intended to detect slides with evidence of squamous carcinoma and adenocarcinoma and their usual precursor conditions. These abnormalities fall within the following diagnostic categories of The Bethesda System (TBS):</p> <p><b>Epithelial Cell Abnormalities</b></p> <p><b><i>Squamous Cell</i></b></p> <ul style="list-style-type: none"><li>■ Atypical squamous cells of undetermined significance (ASCUS)</li><li>■ Low-grade squamous intraepithelial lesions (LSIL)</li><li>■ High-grade squamous intraepithelial lesions (HSIL)</li><li>■ Squamous cell carcinoma</li></ul> <p><b><i>Glandular Cell</i></b></p> <ul style="list-style-type: none"><li>■ Atypical glandular cells of undetermined significance (AGUS), including Adenocarcinoma in situ (AIS)</li><li>■ Endocervical adenocarcinoma</li><li>■ Endometrial adenocarcinoma</li></ul> <p>The performance characteristics of the FocalPoint system have not been established for the detection of the following diagnostic categories of The Bethesda System:</p> <ul style="list-style-type: none"><li>■ Endometrial cells, cytologically benign, in a post-menopausal woman.</li><li>■ Reactive changes associated with radiation and atrophy with inflammation.</li><li>■ Rare malignant neoplasms, such as extrauterine and metastatic carcinomas, and sarcomas.</li></ul> <p>The FocalPoint system identifies up to 25% of successfully processed slides as requiring no further review.</p> <p>Note: FocalPoint is not intended to replace laboratory slide review processes for <i>high risk</i> slides, which are those where a primary health care provider has requested special handling of a case for a specified concern, or where the clinical laboratory, through its own procedures, has identified a need for an additional screening of the case.</p>
<p><b>Effective Date:</b></p>	<p><b>Effective February 2, 2009</b></p>

<p><b>Tests and Test Codes affected by this Laboratory Update:</b></p>	<p><b>We perform all SurePath Liquid Based Cytology Tests using the FocalPoint automated cervical cytology screening device</b></p> <p><b>14475</b> SurePath Liquid Based Cytology Test with FocalPoint automated cervical cytology screening device.</p> <p><b>14584:</b> Liquid Based Cytology Test using automated screening device with Reflex *HPV DNA (High Risk)</p> <ul style="list-style-type: none"> <li>▪ For 14584, unless sample for the High Risk HPV DNA is submitted using a Digene Sampler, the *HPV DNA test will be performed using fluid remaining from the liquid based cytology vial.</li> </ul> <p><b>15967:</b> Liquid Based Cytology Test using automated screening device and HPV DNA (High Risk)</p> <ul style="list-style-type: none"> <li>▪ The preferred collection technique for 15967 is to use the Digene Sampler for the HPV DNA (High Risk)</li> <li>▪ For 15967, unless sample for the High Risk HPV is submitted using a Digene Sampler, the *HPV test will be performed using fluid remaining from the liquid based cytology vial.</li> </ul> <p><b>17615:</b> *<i>Chlamydia trachomatis</i> DNA, SDA  <b>17617:</b> *<i>Neisseria gonorrhoeae</i> DNA, SDA  <b>17618:</b> *<i>Chlamydia/N. gonorrhoeae</i> DNA, SDA</p> <p>*Quest Diagnostics has validated modifications to FDA cleared / approved assays for the detection of HPV, Chlamydia trachomatis, and Neisseria gonorrhoeae in liquid based cytology fluid in accordance with CLIA regulations. These assay modifications have not been approved or cleared by the Food and Drug Administration.</p> <p><i>For HPV DNA (High Risk) <u>Only</u> order Test Code 31532 (Submit Digene Sampler).</i></p>
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<p><b>CPT Codes:</b></p> <p><i>These CPT codes are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.</i></p>	<p><b>We perform all SurePath Liquid Based Cytology Tests using the FocalPoint automated cervical cytology screening device</b></p> <p><b>14475:</b> SurePath Liquid Based Cytology Test with FocalPoint using automated cervical cytology screening device.</p> <p><b>14475, 14584, 15967:</b> CPT codes for Liquid Based Cytology are dependent on the method used to perform the Liquid Based Cytology test; if automated screening CPT 88174; if automated screening with manual review CPT 88175; if automated screening failed and a manual review is performed only CPT 88142.</p> <p>Pap results requiring physician interpretation will be performed at an additional charge (CPT 88141).</p> <p><b>14584:</b> Liquid Based Cytology Test using automated screening device, with Reflex *HPV DNA (High Risk). HPV DNA, a test for High Risk HPV, will be performed for interpretations of Atypical Squamous Cells, at an additional charge (HPV CPT 87621, See above for Liquid Based Cytology CPT codes).</p> <ul style="list-style-type: none"> <li>▪ For 14584, unless sample for the High Risk HPV is submitted using a Digene Sampler, the *HPV test will be performed using fluid remaining from the liquid based cytology vial.</li> </ul> <p><b>15967:</b> Liquid Based Cytology Test using automated screening device and HPV DNA (High Risk) (HPV CPT 87621, See above for Liquid Based Cytology CPT codes).</p> <ul style="list-style-type: none"> <li>▪ The preferred collection technique for 15967 is to use the Digene Sampler for the HPV DNA (High Risk)</li> <li>▪ For 15967, unless sample for the High Risk HPV is submitted using a Digene Sampler, the *HPV test will be performed using fluid remaining from the liquid based cytology vial.</li> </ul> <p><b>17615:</b> *Chlamydia trachomatis DNA, SDA (CPT 87491)  <b>17617:</b> *Neisseria gonorrhoeae DNA, SDA (CPT 87591)  <b>17618:</b> *Chlamydia/N. gonorrhoeae DNA, SDA (CPT 87491, 87591)  <b>31532:</b> HPV DNA (High Risk) (CPT 87621)  (Use Digene sampler only)</p> <p>*Quest Diagnostics has validated modifications to FDA cleared / approved assays for the detection of HPV, Chlamydia trachomatis, and Neisseria gonorrhoeae in liquid based cytology fluid in accordance with CLIA regulations. These assay modifications have not been approved or cleared by the Food and Drug Administration.</p>
<p><b>Additional Information:</b></p>	<p>A request for CT/GC testing using fluid from the liquid cytology vial must be indicated on the initial test requisition, rather than subsequently requested as an add-on test.</p>

<p><b>Collection Information:</b></p> <p><b>BRUSH / SPATULA DEVICE</b></p>	<p><b>BRUSH / SPATULA DEVICE</b></p> <ol style="list-style-type: none"> <li>1. Complete the test requisition.</li> <li>2. Record the patient's First Initial and Full Last Name or unique identifier on the vial.</li> <li>3. If testing for Chlamydia and/or GC by Amplified DNA probe is desired from a separately obtained sample, then this swab sample should be obtained prior to Pap collection to minimize test interference from blood.</li> <li>4. Select contoured end of Pap Perfect® plastic spatula and rotate 360 around the entire ectocervix while maintaining tight contact with ectocervical surface. Remove spatula.</li> <li>5. Snap the contoured end from the rest of the spatula handle and let drop into the SurePath vial. Do not touch collection end.</li> <li>6. Insert Cytobrush® Plus GT device into the endocervix until only the bottom-most bristles are exposed at the os. Slowly rotate 1/4 to 1/2 turn in one direction. To reduce unnecessary bleeding, do not over-rotate brush. Over-rotation may result in poor sample collection. Remove cytobrush device.</li> <li>7. Snap the brush-head end from the rest of the handle and let drop into the SurePath vial. Do not touch collection end.</li> <li>8. Tighten the cap so that the torque line on the cap passes the torque line on the vial.</li> <li>9. Place the vial and requisition in a specimen bag for transport to the laboratory.</li> </ol>
<p><b>Collection information:</b></p> <p><b>BROOM-LIKE DEVICE (Rovers Cervex-Brush)</b></p>	<p><b>BROOM-LIKE DEVICE (Rovers Cervex-Brush)</b></p> <ol style="list-style-type: none"> <li>1. Complete the test requisition.</li> <li>2. Record the patient's First Initial and Full Last Name or unique identifier on the vial.</li> <li>3. If testing for Chlamydia and/or GC by Amplified DNA probe is desired from a separately obtained sample, then this swab sample should be obtained prior to Pap collection to minimize test interference from blood.</li> <li>4. Obtain an adequate sampling from the cervix using a broom-like device.</li> <li>5. Insert the central bristles of the broom into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently, and rotate the broom in a clockwise direction five times. ▲ DO NOT ROTATE IN A COUNTERCLOCKWISE DIRECTION.</li> <li>6. Remove and "pop-off" broom head from the rest of the handle and drop into the SurePath vial.</li> <li>7. Tighten the cap so that the torque line on the cap passes the torque line on the vial.</li> <li>8. Place the vial and requisition in a specimen bag for transport to the laboratory.</li> </ol>

<p><b>Collection information:</b></p> <p><b>Other Tests</b></p>	<p><b>We perform all SurePath Liquid Based Cytology Tests using the FocalPoint automated cervical cytology screening device</b></p> <p><b>Liquid Based Cytology Test using automated screening device with Reflex *HPV DNA (High Risk) (Test Code 14584)</b>  Collect Liquid Based Cytology sample as described above (unless sample for the High Risk HPV is submitted using a Digene Sampler). The *HPV test (if medically indicated by virtue of reflex parameters) will be performed using fluid remaining from the liquid based cytology vial when the Pap test interpretation is ASC-US.</p> <p><b>Liquid Based Cytology Test using automated screening device and HPV DNA Screen (High Risk) (Test Code 15967)</b>  The preferred collection technique is to use the Digene Sampler for the HPV DNA (High Risk).</p> <ul style="list-style-type: none"> <li>▪ Collect Liquid Based Cytology sample as described above.</li> <li>▪ Submit a separate sample using a Digene Sampler placed into 1 mL of Digene transport medium for the HPV testing.</li> <li>▪ Unless sample for the High Risk HPV is submitted using a Digene Sampler, the *HPV test will be performed using fluid remaining from the liquid based cytology vial.</li> </ul> <p><b>Liquid Based Cytology test using automated screening device and *CT/GC</b></p> <ul style="list-style-type: none"> <li>▪ <b>Collect Liquid Based Cytology sample as described above.</b></li> <li>▪ <i>The request for CT/GC must be indicated on the initial test requisition, rather than subsequently ordered as an add-on.</i></li> </ul>
<p><b>Supplies</b></p>	<ul style="list-style-type: none"> <li>▪ <b>SurePath Supplies</b>  Contact the laboratory or your Sales Representative to request SurePath Cytology supplies. A start-up kit will be sent to you that will include: <ul style="list-style-type: none"> <li>• SurePath vials</li> <li>• Rovers Cervex-Brush or Spatula/Endocervex Brush Collection devices.</li> <li>• Labels to be affixed to manual requisitions</li> </ul> </li> <li>▪ Digene Sampler for HPV</li> </ul>

## Test Changes

<b>Rubella Immune Status</b>			
Clinical Significance:	Rubella is an acute exanthematous viral infection of children and adults. Rash, fever and lymphadenopathy characterize the illness. In the absence of a current or recent infection, a demonstration of specific IgG on a serum sample is evidence of immunity to Rubella.		
<b>Effective Date:</b>	<b>February 9, 2009</b>		
Test Code:	802		
Specimen Requirements:	1 mL serum ( <b>0.1 Minimum</b> )		
Units of Measure	<b>Index</b>		
Reference Ranges:	Rubella Ab IgG:	< or = 0.90	Negative
		0.91-1.09	Equivocal
		> or = 1.10	Positive
Methodology:	<b>Immunoassay</b>		
Additional Information:	Update units of measure, methodology, and minimum volume.		

<b>Rubella Antibody (IgM)</b>			
Clinical Significance:	Rubella is an acute exanthematous viral infection of children and adults. Rash, fever and lymphadenopathy characterize the illness. While many infections are subclinical, this virus has the potential to cause fetal infection with resultant birth defects. Diagnosis of a rubella infection is best made serologically.		
<b>Effective Date:</b>	<b>February 9, 2009</b>		
<i>Former Test Name:</i>	<b><i>Rubella IgM Antibody</i></b>		
Test Code:	4422		
Specimen Requirements:	1 mL serum (0.6 Minimum)		
Units of Measure	<b>Ratio</b>		
Reference Ranges:	<b>Rubella Ab IgM:</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90-1.09</b>	<b>Equivocal</b>
		<b>&gt; or = 1.10</b>	<b>Positive</b>
Methodology:	<b>Immunoassay</b>		
Additional Information:	Update test title, units of measure, and methodology. Please note this test is included in the following group code: 6444 Torch Panel, Acute.		

<b>Lyme Disease Antibody, Total, EIA with Reflex to Western Blot (IgG, IgM)</b>			
Clinical Significance:	Lyme Disease is transmitted by a tick vector carrying <i>Borrelia burgdorferi</i> . Specimens are screened by the the EIA (total antibody) test, and all positive and equivocal screen results are confirmed by retesting the specimen using the IgG and IgM Western Blot procedures.		
<b>Effective Date:</b>	<b>February 9, 2009</b>		
<i>Former Test Name:</i>	<i>Lyme Disease, EIA with Reflex IgG, IgM Western Blot</i>		
Test Code:	6646		
CPT Code(s):	86618		
Specimen Requirements:	1 mL Serum (0.5 mL Minimum)		
Units of Measure	<b>Index</b>		
Reference Ranges:	Lyme Disease Antibody, Total, EIA	< or = 0.90	Negative
		0.91-1.09	Equivocal
		> or = 1.10	Positive
Methodology:	<b>Immunoassay/Western Blot</b>		
Additional Information:	Update test title, units of measure, and methodology. Positive or equivocal Lyme Antibody Screens will reflex to Lyme Disease Antibodies (IgG, IgM), Western Blot (CPT: 86617 (x2)) at additional charge.		

<b>Lyme Disease Antibodies (IgG, IgM), Western Blot</b>			
Clinical Significance:	Lyme Disease is transmitted by a tick vector carrying <i>Borrelia burgdorferi</i> . Western Blot testing qualitatively examines, with high specificity, antibodies in a patient's specimen. Western Blot testing is appropriate for confirming a detected EIA or IFA test result.		
<b>Effective Date:</b>	<b>February 9, 2009</b>		
<i>Former Test Name:</i>	<i>Lyme Disease IgG and IgM, Western Blot</i>		
Test Code:	8593		
CPT Code(s):	86617 (x2)		
Specimen Requirements:	1 mL Serum ( <b>0.1 mL Minimum</b> )		
Reference Range:	<b>Lyme Disease Ab IgG, WB</b>	Negative	
	<b>Lyme Disease Ab IgM, WB</b>	Negative	
Additional Information:	Update test title and minimum volume.		

<b>Herpes Simplex Virus 1 and 2 (IgG), Type-Specific Antibodies (HerpeSelect®)</b>			
Clinical Significance:	Herpes Simplex Virus (HSV) is responsible for several clinically significant human viral diseases, with severity ranging from inapparent to fatal. The performance of this assay has not been established for use in a pediatric population, for neonatal screening, or for testing of immunocompromised patients.		
Effective Date:	<b>February 9, 2009</b>		
Test Code:	6447		
CPT Code(s):	86695, 86696		
Specimen Requirements:	1 mL Serum ( <b>0.2 mL Minimum</b> )		
Reject Criteria:	Gross hemolysis or gross lipemia, or heat-inactivated serum		
Transport Temperature:	Room Temperature		
Specimen Stability:	Room temperature: 4 days Refrigerated: 7 days Frozen: 30 days		
Units of Measure:	<b>Index</b>		
Reference Range:	<b>HSV 1 IgG</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90 – 1.10</b>	<b>Equivocal</b>
		<b>&gt; 1.10</b>	<b>Positive</b>
	<b>HSV 2 IgG</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90 – 1.10</b>	<b>Equivocal</b>
		<b>&gt; 1.10</b>	<b>Positive</b>
Methodology:	Immunoassay		
Assay Category:	FDA Approved/Cleared		
Additional Information:	Update units of measure, reference range, and minimum volume.		

<b>Herpes Simplex Virus 1 IgG, Type-Specific Antibody (HerpeSelect®)</b>			
Effective Date:	<b>February 9, 2009</b>		
Test Code:	3636		
CPT Code(s):	86695		
Specimen Requirements:	1 mL Serum ( <b>0.2 mL Minimum</b> )		
Reject Criteria:	Gross hemolysis or gross lipemia, or heat-inactivated serum		
Transport Temperature:	Room Temperature		
Specimen Stability:	Room temperature: 4 days Refrigerated: 7 days Frozen: 30 days		
Units of Measure:	<b>Index</b>		
Reference Range:	<b>HSV 1 IgG</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90 – 1.10</b>	<b>Equivocal</b>
		<b>&gt; 1.10</b>	<b>Positive</b>
Methodology:	Immunoassay		
Assay Category:	FDA Approved/Cleared		
Additional Information:	Update units of measure, reference range, and minimum volume.		

<b>Herpes Simplex Virus 2 IgG, Type-Specific Antibody (HerpeSelect®)</b>			
<b>Effective Date:</b>	<b>February 9, 2009</b>		
Test Code:	3640		
CPT Code(s):	86696		
Specimen Requirements:	1 mL Serum ( <b>0.2 mL Minimum</b> )		
Reject Criteria:	Gross hemolysis or gross lipemia, or heat-inactivated serum		
Transport Temperature:	Room Temperature		
Specimen Stability:	Room temperature: 4 days Refrigerated: 7 days Frozen: 30 days		
Units of Measure:	<b>Index</b>		
Reference Range:	<b>HSV 2 IgG</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90 – 1.10</b>	<b>Equivocal</b>
		<b>&gt; 1.10</b>	<b>Positive</b>
Methodology:	Immunoassay		
Assay Category:	FDA Approved/Cleared		
Additional Information:	Update units of measure, reference range, and minimum volume.		

<b>HSV 2 IgG, Type-Specific Antibody (HerpeSelect®) with Reflex to HSV-2 Inhibition</b>			
<b>Effective Date:</b>	<b>February 9, 2009</b>		
Test Code:	17170		
CPT Code(s):	86696		
Specimen Requirements:	1 mL Serum ( <b>0.5 mL Minimum</b> )		
Reject Criteria:	Gross hemolysis or gross lipemia		
Transport Temperature:	Room Temperature		
Specimen Stability:	Room temperature: 4 days Refrigerated: 7 days Frozen: 30 days		
Units of Measure:	<b>Index</b>		
Reference Range:	<b>HSV 2 IgG</b>	<b>&lt; 0.90</b>	<b>Negative</b>
		<b>0.90 – 1.10</b>	<b>Equivocal</b>
		<b>&gt; 1.10</b>	<b>Positive</b>
Methodology:	Immunoassay		
Assay Category:	FDA Approved/Cleared		
Additional Information:	Update units of measure, reference range, minimum volume. If the HSV-2 IgG HerpeSelect® is positive, the HSV-2 Inhibition Assay will be performed at an additional charge (CPT code: 86696).		

## Redirects

<b>Beta-2 Transferrin</b>	
<b>Effective Date:</b>	<b>February 9, 2009</b>
Test Code:	<b>10640</b>
CPT Code:	<b>86849</b>
Specimen Requirements:	<b>0.5 mL body fluid (nasal, otic, etc) (sterile, leakproof container) (0.2 mL minimum)</b>
Reference Ranges:	<b>Not detected</b>
Methodology:	Electrophoresis, <b>Immunofixation</b>
Assay Category:	<b>Research Use Only</b>
Performing Site:	This test, previously performed at Mayo Medical Laboratories, will now be performed at Quest Diagnostics Nichols Institute, Chantilly, VA.

<b>Phosphatidylcholine Antibodies (IgG, IgA, IgM)</b>	
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	<b>30037</b>
CPT Code(s):	<b>83520 (x3)</b>
Specimen Requirements:	<b>1 mL serum (minimum 0.5 mL)</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room temperature: 1 hour</b> Refrigerated: 14 days Frozen: 60 days
Assay Category:	<b>IgG, IgM: Research Use Only</b> <b>IgA: Laboratory Developed Test</b>
Performing Site:	This test previously performed at Cambridge Biomedical, will now be performed at Specialty Laboratories.

<b>Phosphatidylethanolamine Antibodies (IgG, IgA, IgM)</b>	
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	<b>16619</b>
CPT Code(s):	<b>83520(x3)</b>
Specimen Requirements:	<b>1 mL serum (minimum 0.5 mL)</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room temperature: 1 hour</b> <b>Refrigerated :14 days</b> <b>Frozen : 60 days</b>
Reference Ranges:	<b>IgG &lt;10 U/mL</b> <b>IgM &lt;10 U/mL</b> <b>IgA &lt;2.0 Index</b>
Methodology:	<b>Immunoassay</b>
Assay Category:	<b>IgG/IgM: Research Use Only</b> <b>IgA: Laboratory Developed Test</b>
Performing Site:	This test previously performed at Cambridge Biomedical, will now be performed at Specialty Laboratories.

<b>Phosphatidylinositol Antibodies (IgG,IgA,IgM)</b>	
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code :	<b>10480</b>
CPT Code(s):	<b>83520 (x3)</b>
Specimen Requirements:	<b>1 mL serum (minimum 0.5 mL)</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room Temperature: 1 hour Refrigerated :14 days Frozen : 60 days</b>
Reference Ranges:	<b>IgG &lt;10 U/mL IgM &lt;10 U/mL IgA &lt;15 U/mL</b>
Methodology:	<b>Immunoassay</b>
Assay Category:	<b>IgG, IgM: Research Use Only IgA: Laboratory Developed Test</b>
Performing Site:	This test previously performed at Cambridge Biomedical, will now be performed at Specialty Laboratories.

**QUEST DIAGNOSTICS NICHOLS INSTITUTE, San Juan Capistrano & Chantilly,  
Focus Diagnostics, Inc. and Specialty Laboratories**

**New Tests**

The following tests will be available through Quest Diagnostics Nichols Institute on the dates indicated below.

<b>FISH, Lymphoid Disorder, MYB, del 6q23</b>		
Clinical Significance:	Chromosome 6q deletion is a frequent abnormality in lymphoid malignancies including acute lymphoblastic leukemia, chronic lymphoid disorders, non-Hodgkin lymphoma, and multiple myeloma. It may be the sole clonal abnormality in as much as 30% of cases. Deletions may be small and difficult to resolve using conventional chromosome analysis. Deletion of MYB may be associated with loss of a recessive tumor suppressor gene and may be an initial step in leukemogenesis.	
<b>Effective Date:</b>	<b>Available now</b>	
Test Code:	<b>16593</b>	
CPT Code:	<b>88271, 88275, 88291</b>	
Specimen Requirements:	<b>3 mL bone marrow (culture transport media) Clinical history and reason for referral are required with test order. Prior therapy and transplant history should be provided with test order.</b>	
Transport Temperature:	<b>Room temperature</b>	
Specimen Stability:	<b>Specimen viability decreases during transit. Send specimen to testing lab for viability determination. Do not reject.</b>	
Reference Ranges:	<b>Interpretive report</b>	
Methodology:	<b>Fluorescence In Situ Hybridization</b>	
Assay Category:	<b>ASR Class I</b>	
Performing Site:	Quest Diagnostics Nichols Institute, Chantilly	
Additional Information:	If results are not possible, the test order may be canceled and replaced by code <b>CHY 416</b> - Cytogenetics Communication.	
DLO	Page 14 of 26	January 2009

<b>Fungal Identification, Phenotypic and Sequencing</b>	
Clinical Significance:	This test uses phenotypic characteristics and DNA sequencing and analysis of the Internal Transcribed Spacer (ITS) region of the rRNA gene to identify fungi to the genus level or below, allowing faster identification.
<b>Effective Date:</b>	<b>January 12, 2009</b>
Test Code:	<b>16578</b>
CPT Code(s):	<b>83890, 83898, 83894, 83904 (x2), 83909, 83912</b>
Specimen Requirements:	<b>Pure culture isolate of yeast or mold in Agar slant double walled container Preferred specimen is culture isolate in an agar slant in a double walled container. Mixed cultures will not be accepted. Subculture isolate to the appropriate slant and submit in double walled container.</b>
Transport Temperature:	<b>Room temperature</b>
Specimen Stability:	<b>Room temperature and refrigerated: Determined by viability Frozen: Unacceptable</b>
Reference Ranges:	<b>By report</b>
Methodology:	<b>Conventional and ITS Sequence</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Quest Diagnostics Nichols Institute, San Juan Capistrano

<b>Fungal Sequencing, ITS Region</b>	
Clinical Significance:	This test uses DNA sequencing and analysis of the Internal Transcribed Spacer (ITS) region of the rRNA gene to identify fungi to the genus level or below, allowing faster identification.
<b>Effective Date:</b>	<b>January 12, 2009</b>
Test Code:	<b>16579</b>
CPT Code(s):	<b>83890, 83898, 83894, 83904 (x2), 83909, 83912</b>
Specimen Requirements:	<b>Pure culture isolate of yeast or mold in Agar slant double walled container Preferred specimen is culture isolate in an agar slant in a double walled container. Mixed cultures will not be accepted. Subculture isolate to the appropriate slant and submit in double walled container.</b>
Transport Temperature:	<b>Room temperature</b>
Specimen Stability:	<b>Room temperature and refrigerated: Determined by viability Frozen: Unacceptable</b>
Reference Ranges:	<b>By report</b>
Methodology:	<b>Sequencing</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Quest Diagnostics Nichols Institute, San Juan Capistrano

<b>Galactosemia Mutation Analysis</b>	
Clinical Significance:	This test detects 80% of mutations causing galactosemia in the general US population, a disorder of galactose metabolism, as well as the Duarte variant. It identifies carriers and individuals affected with the disease.
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	<b>16613</b>
CPT Code(s):	<b>83891, 83900, 83901, 83892 (x2), 83909, 83914, 83912</b>
Specimen Requirements:	<b>5 mL EDTA (lavender-top) whole blood Specimen stability is crucial. Store and ship ambient immediately.</b>
Transport Temperature:	<b>Room temperature</b>
Specimen Stability:	<b>Room temperature and Refrigerated: 8 days Frozen: Do Not Freeze</b>
Reference Ranges:	<b>By report</b>
Methodology:	<b>Polymerase Chain Reaction, Single Nucleotidase Primer Extension</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Quest Diagnostics Nichols Institute, San Juan Capistrano

<b>Human Metapneumovirus, DFA</b>	
Clinical Significance:	This procedure detects viral infection by Human Metapneumovirus (hMPV). The DFA test methodology provides a rapid diagnostic procedure in the detection of hMPV as the causative agent of respiratory illness. This type of lab result, in conjunction with all the other information about the patient can assist the physician in rendering a diagnosis. Diagnosis of virus infection facilitates appropriate selection of antiviral drug therapy, if available, and prevents the inappropriate use of antibiotics and subsequent development of antibiotic-resistant strains of bacteria.
<b>Effective Date:</b>	<b>December 1, 2008</b>
Test Code:	<b>16607</b>
CPT Code:	<b>87299</b>
Specimen Requirements:	<b>2 mL nasopharyngeal aspirate/wash in (VCM/UTM or M4)</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room temperature: Unacceptable Refrigerated: 96 hours Frozen: Unacceptable; -70°C: 30 days</b>
Reference Ranges:	<b>Not detected</b>
Methodology:	<b>Direct Immunofluorescence Assay</b>
Assay Category:	<b>ASR Class I</b>
Performing Site:	Quest Diagnostics Nichols Institute, Chantilly and Focus Diagnostics, Inc.

**16677 Phosphatidylcholine Antibody (IgG)****16678 Phosphatidylcholine Antibody (IgM)**

Clinical Significance:	Phospholipid autoantibodies specific to phosphatidylinositol (PI), phosphatidylglycerol (PG), phosphatidylserine (PS), phosphatidylethanolamine (PE), phosphatidylcholine (PC), phosphatidic acid (PA), cardiolipin (CL) and sphingomyelin are found in hematologic autoimmune diseases, especially anti-phospholipid syndrome (APS) and systemic lupus erythematosus (SLE). APS is characterized by arterial and venous thrombosis, thrombocytopenia, and recurrent fetal loss; thrombosis, thrombocytopenia and hemolytic anemia also occur in SLE and are associated with the presence of phospholipid autoantibodies. Women with infertility showing spontaneous abortion or in vitro fertilization failure demonstrate PI autoantibodies in 25% of cases.
<b>Effective Date:</b>	<b>February 16, 2009</b>
CPT Code(s):	<b>83520</b>
Specimen Requirements:	<b>1 mL serum</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room temperature: 1 hour Refrigerated :14 days Frozen : 60 days</b>
Reference Ranges:	<b>&lt;10 U/mL</b>
Methodology:	<b>Immunoassay</b>
Assay Category:	<b>Research Use Only</b>
Performing Site:	Specialty Laboratories

**Phosphatidylcholine Antibody (IgA)**

See table above for missing information

Test Code:	<b>16679</b>
Reference Ranges:	<b>&lt;2.0 Index</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Specialty Laboratories

**16680 Phosphatidylethanolamine Antibody (IgG)****16681 Phosphatidylethanolamine Antibody (IgM)**

<b>Effective Date:</b>	<b>February 16, 2009</b>
CPT Code(s):	<b>83520</b>
Specimen Requirements:	<b>1 mL serum (minimum 0.5mL)</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room temperature: 1 hour Refrigerated: 14 days Frozen: 60 days</b>
Reference Ranges:	<b>&lt;10 U/mL</b>
Methodology:	<b>Immunoassay</b>
Assay Category:	<b>Research Use Only</b>
Performing Site:	Specialty Laboratories

<b>Phosphatidylethanolamine Antibody (IgA)</b> <b>See table above for missing information</b>	
Test Code:	<b>16682</b>
Reference Ranges:	<b>&lt;2.0 Index</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Specialty Laboratories

<b>16684 Phosphatidylinositol Antibody (IgG)</b> <b>16685 Phosphatidylinositol Antibody (IgM)</b>	
<b>Effective Date:</b>	<b>February 16, 2009</b>
CPT Code(s):	<b>83520</b>
Specimen Requirements:	<b>1 mL serum</b>
Transport Temperature:	<b>Refrigerated</b>
Specimen Stability:	<b>Room Temperature: 1 hour</b> <b>Refrigerated :14 days</b> <b>Frozen : 60 days</b>
Reference Ranges:	<b>&lt;10 U/mL</b>
Methodology:	<b>Immunoassay</b>
Assay Category:	<b>Research Use Only</b>
Performing Site:	Specialty Laboratories

<b>Phosphatidylinositol Antibody (IgA)</b> <b>See table above for missing information</b>	
Test Code :	<b>16686</b>
Reference Ranges:	<b>&lt;15 U/mL</b>
Assay Category:	<b>Laboratory Developed Test</b>
Performing Site:	Specialty Laboratories

### Test Changes

The following test changes will be effective on the dates indicated below. Please note that only the fields listed in bold type are being changed; former test names and test codes have been italicized. Additional information, regarding the change, will be provided where applicable.

<b>PTH-Related Protein (PTH-RP)</b>	
Clinical Significance:	Differential diagnosis of hypercalcemia; manage patients with solid tumors and hypercalcemia.
<b>Effective Date:</b>	<b>February 9, 2009</b>
Test Code:	<b>34478</b>
Specimen Requirements:	<b>0.5 mL sodium heparin (green-top) plasma (minimum: 0.3 mL)</b>
Transport Temperature:	<b>Room temperature</b>
Specimen Stability:	<b>Room temperature and Refrigerated: 7 days</b> <b>Frozen: 28 days</b>
Reference Ranges:	<b>14-27 pg/mL</b> <b>This test was developed and its performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano. Performance characteristics refer to the analytical performance of the test.</b>
Assay Category:	<b>Laboratory Developed Test</b>
Additional Information:	Update test code, specimen requirements, transport temperature, stability, reference range, always message, and assay category.

<b>C Telopeptide (CTx)</b>				
Clinical Significance:	CTx is useful to assess bone resorption in patients with metabolic bone disease. The test is also useful in monitoring therapy to slow or halt osteoporotic bone loss.			
Effective Date:	<b>February 16, 2009</b>			
Test Code:	17406			
Reference Ranges:	Adult Females:	18-29 years:	64-640	pg/mL
		30-39 years:	60-650	pg/mL
		40-49 years:	40-465	pg/mL
	Adult Males:	18-29 years:	87-1200	pg/mL
	30-39 years:	70-780	pg/mL	
	40-49 years:	60-700	pg/mL	
	50-68 years:	87-345	pg/mL	
	<b>Pediatric Females:</b>	<b>5-9 years:</b>	<b>574-1849</b>	<b>pg/mL</b>
		<b>10-13 years:</b>	<b>519-2415</b>	<b>pg/mL</b>
		<b>14-17 years:</b>	<b>242-1291</b>	<b>pg/mL</b>
	<b>Pediatric Males:</b>	<b>5-9 years:</b>	<b>574-1849</b>	<b>pg/mL</b>
		<b>10-13 years:</b>	<b>519-2415</b>	<b>pg/mL</b>
		<b>14-17 years:</b>	<b>435-2924</b>	<b>pg/mL</b>
Performing Site:	Quest Diagnostics Nichols Institute			
Additional Information:	Add pediatric reference ranges.			

<b>Lactate Dehydrogenase Isoenzyme Panel</b>	
Clinical Significance:	Lactate Dehydrogenase (LD) is an enzyme that is present in many different organs and tissues. LD Isoenzymes (LDI) are useful in distinguishing the different isoenzymes expressed differentially in tissues and organs, e.g., cardiac muscle, skeletal muscle, and liver.
Effective Date:	<b>February 16, 2009</b>
Test Code:	4411
Specimen Stability:	Room temperature: 7 days Refrigerated: Unacceptable <b>Frozen (all temps) are unacceptable</b>
Performing Site:	Quest Diagnostics Nichols Institute
Additional Information:	Update test name and stability.

<b>Valproic Acid, Free</b>	
Clinical Significance:	Valproic acid is used as an anticonvulsant to treat certain types of seizures, to prevent migraine headaches, and to treat various psychiatric illnesses such as bipolar disorder and aggression. Drugs that compete for protein-binding sites with valproic acid, can increase the concentration of valproic acid. Measurement of the free concentration is useful if toxicity is suspected.
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	3314
Specimen requirements:	3 mL no additive (red-top) serum <b>Do not use gel barrier tubes. Collect as a trough just before next dose. Centrifuge and immediately separate serum or plasma specimens from the cells into clean, plastic, screw-capped vial(s). Transport refrigerated (cold packs).</b>
Specimen Stability:	<b>Room temperature: 48 hours</b> Refrigerated: 7 days <b>Frozen: 30 days</b>
Performing Site:	This test previously performed at both Quest Diagnostics Nichols Institutes, will now be performed at Quest Diagnostics Nichols Institute, Chantilly.
Additional Information:	Update specimen requirements, stability, test code and performing site.

<b>Valproic Acid, Total and Free</b> <i>*Includes: Valproic Acid, Free * Valproic Acid</i>	
Clinical Significance:	Valproic acid is used as an anticonvulsant to treat certain types of seizures, to prevent migraine headaches, and to treat various psychiatric illnesses such as bipolar disorder and aggression. Drugs that compete for protein-binding sites with Valproic Acid, can increase the concentration of Valproic Acid. Therapeutic drug monitoring is useful to optimize dose. Measurement of the free concentration is useful if toxicity is suspected.
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	<b>6651</b>
Specimen requirements:	3 mL no additive (red-top) serum <b>EDTA plasma is also acceptable.</b> <b>Do not use gel barrier tubes. Collect as a trough just before next dose. Centrifuge and immediately separate serum or plasma specimens from the cells into clean, plastic, screw-capped vial(s). Transport refrigerated (cold packs).</b>
Specimen Stability:	<b>Room temperature: 48 hours</b> Refrigerated: 7 days Frozen: 30 days
Performing Site:	This test previously performed at both Quest Diagnostics Nichols Institutes, will now be performed at Quest Diagnostics Nichols Institute, Chantilly.
Additional Information:	Update test code, specimen requirements, stability and performing site.

## Focus Diagnostics Methodology and Test Name changes

Effective February 23, 2009, the following tests, performed at Focus Diagnostics, Inc. will be performed by Broth Method and have the name changes indicated below:

<b>AFB Susc, M. Tuberculosis Complex Primary Panel, Agar Method</b>	
<b>Effective Date:</b>	<b>February 23, 2009</b>
<b>Test Code:</b>	<b>1138</b>
Methodology:	<b>Agar Method, Broth Method (pyrazinamide)</b>
Performing Site:	Focus Diagnostics, Inc.
Additional Information:	Update methodology.

## Discontinued Tests

<b>Valproic Acid Panel</b>	
<b>Effective Date:</b>	<b>February 16, 2009</b>
Test Code:	37409
Additional Information:	This test will be discontinued. The recommended alternative is 6651-Valproic Acid, Total & Free

AM=6am-12pm, PM=12pm-6pm, E=6pm-12am, Next Day=12am-6am Pacific Time

December 2008

**Subject: CPT Code changes for CPT 2009**

Dear Valued Client:

The American Medical Association (AMA) has made CPT code changes in the 2009 edition of the AMA Current Procedural Terminology (CPT) coding manual.

DLO will be implementing these changes effective January 1, 2009. Overall, the changes for 2009 affect the way we bill some of our tests. The chart attached lists the tests affected and the appropriate CPT code changes.

Please do not hesitate to call your DLO Sales Representative with any questions or concerns you may have regarding CPT code changes. Thank you very much for using DLO for your laboratory testing needs.

Yours truly,

Controller

**AMA Changes in CPT Coding  
Effective January 1, 2009**

DLO Test Name	DLO Order Code	NEW CPT Codes Effective 1/1/2009	
		2008 CPT Codes	
Achondroplasia Mutation Analysis	16061	83891, 83892 x2, 83909, 83914, 83900, 83912	83891, 83892 x3, 83909, 83914, 83900, 83912
Alpha-1 Antitrypsin (AAT) Mutation Analysis	15340	83891, 83900, 83892, 83909, 83912	83891, 83900, 83892 x2, 83909, 83912
Beta-Globin Complete	14974	83891, 83892, 83909, 83898 x4, 83904 x4, 83912	83891, 83892 x2, 83909, 83898 x4, 83904 x4, 83912
CAH (21-Hydroxylase Deficiency) Common Mutations	14755	83891, 83900, 83901 x2, 83894, 83892 x2, 83909, 83914 x11, 83912	83891, 83900, 83901 x2, 83894, 83892 x3, 83909, 83914 x11, 83912
Cystic Fibrosis D1152H Mutation Analysis	15335	83891, 83898, 83892 x2, 83909, 83914, 83912	83891, 83898, 83892 x3, 83909, 83914, 83912
Cytochrome P450 2C9 Genotype	11294	83891, 83900, 83892 x2, 83909, 83914 x2, 83912	83891, 83900, 83892 x3, 83909, 83914 x2, 83912
Cytochrome P450 2D6 Genotype	10490	83891, 83900, 83892 x2, 83909, 83914 x8, 83912	83891, 83900, 83892 x3, 83909, 83914 x8, 83912
Dihydropyrimidine Dehydrogenase (DPD) Gene Mutation Analysis	15538	83891, 83898, 83892 x2, 83909, 83914, 83912	83891, 83898, 83892 x3, 83909, 83914, 83912
Factor XI Mutation Analysis (Ashkenazi Jewish)	16023	83891, 83892 x2, 83898, 83914, 83909, 83912	83891, 83892 x3, 83898, 83914, 83909, 83912
Fragile X DNA Analysis, Fetus	10227	88235, 83891, 83892, 83894, 83909, 83897, 83896, 83900, 83912	88235, 83891, 83892 x2, 83894, 83909, 83897, 83896, 83900, 83912
Fragile X with Reflex and Chromosome Analysis, Blood	19792	83891, 83900, 83909, 83894, 83912, 88230, 88262, 88291 If Capillary Electrophoresis performed: 83892 x2, 83909 x8, 83900 x4. If Southern Blot performed: 83891, 83892, 83894, 83897, 83896	83891, 83900, 83909, 83894, 83912, 88230, 88262, 88291 If Capillary Electrophoresis performed: 83892 x2, 83909 x8, 83900 x4. If Southern Blot performed: 83891, 83892 x2, 83894, 83897, 83896
Glycogen Storage Disease Type Ia Mutation Analysis (Ashkenazi Jewish)	16069	83891, 83892 x2, 83909, 83900, 83914 x2, 83912	83891, 83892 x3, 83909, 83900, 83914 x2, 83912

<b>DLO Test Name</b>	<b>DLO Order Code</b>	<b>2008 CPT Codes</b>	<b>NEW CPT Codes Effective 1/1/2009</b>
Hereditary Hemochromatosis DNA Mutation Analysis	35079	83891, 83900, 83892, 83909, 83912	83891, 83900, 83892 x2, 83909, 83912
HLA-A Class I DNA Typing	10951	86813	83891, 83900, 83896x30, 83912
HLA-A High Resolution SBT Typing	17397	86813	83891, 83900, 83904 x6, 83912
HLA-A,B Class I DNA Typing	15757	86813	83891, 83900, x2, 83896 x60, 83912 x2
HLA-A,B,C Class I DNA Typing	15484	86813	83891, 83900x3, 83896 x90, 83912 x3
HLA-A2 Typing W/Reflex A2 High Resolution SBT. Reflex to HLA-A High Resolution SBT Typing	17398	86813	83891, 83900, 83896x30, 83912. If Reflex performed: 83900, 83904 x6, 83912
HLA-B Class I DNA Typing	10950	86813	83891, 83900, 83896x30, 83912
HLA-B High Resolution SBT Typing	17396	86813	83891, 83900, 83904 x6, 83912
HLA-B27 DNA Typing	15584	86812	83891, 83900, 83896x30, 83912
HLA-C Class I DNA Typing	15463	86813	83891, 83900, 83896x30, 83912
HLA-C High Resolution SBT Typing	17395	83813	83891, 83900, 83904 x6, 83912
HLA-DQA1 DNA Typing	19525	86816	83891, 83898, 83896x15, 83912
HLA-DQB1 Class II DNA Typing	10953	86817	83891, 83900, 83896x15, 83912
HLA-DQB1 High Resolution	17394	86817	83891, 83898 x2, 83904 x4, 83912
HLA-DR, DQ Class II DNA Typing	15485	86817	83891, 83900, 83898, 83896 x30, 83912
HLA-DRB1 Class II DNA Typing	10952	86817	83891, 83898, 83896x15, 83912
HLA-DRB1 High Resolution SBT	17393	86817	83891, 83898, 83904 x3, 83912
HLA-DRB3*4*5* DNA Typing	19526	86817	83891, 83900, 83901, 83896x15, 83912

<b>DLO Test Name</b>	<b>DLO Order Code</b>	<b>2008 CPT Codes</b>	<b>NEW CPT Codes Effective 1/1/2009</b>
Long Chain Acyl-CoA Dehydrogenase (LCHAD) Mutation Analysis	11244	83891, 83898, 83892 x2, 83909, 83914, 83912	83891, 83898, 83892 x3, 83909, 83914, 83912
Macular Degeneration Mutation Analysis	16155	83891, 83900, 83892 x2, 83909, 83914 x2, 83912	83891, 83900, 83892 x3, 83909, 83914 x2, 83912
Maple Syrup Disease (MSUD) Mutation Analysis (Ashkenazi Jewish)	16067	83891, 83892 x2, 83909, 83900, 83901, 83914 x3, 83912	83891, 83892 x3, 83909, 83900, 83901, 83914 x3, 83912
Medium Chain Acyl-CoA Dehydrogenase (MCAD) Mutation Analysis	11176	83891, 83898, 83892 x2, 83909, 83914, 83912	83891, 83898, 83892 x3, 83909, 83914, 83912
MEN2 and FMTC Mutations, Exons 10, 11, 13-16	36587	83891 x2, 83898 x6, 83892, 83909, 83904 x6, 83912	83891 x2, 83898 x6, 83892 x2, 83909, 83904 x6, 83912
MLH1 and MSH2 Mutations, HNPCC	14986	83891, 83892, 83898 x40, 83909 x40, 83904 x40, 83912	83891, 83892 x2, 83898 x40, 83909 x40, 83904 x40, 83912
MLH1 Mutation, One Exon, HNPCC	14984	83891, 83892, 83898, 83909, 83904, 83912	83891, 83892 x2, 83898, 83909, 83904, 83912
MSH2 Mutation, One Exon, HNPCC	14981	83891, 83892, 83898, 83909, 83904, 83912	83891, 83892 x2, 83898, 83909, 83904, 83912
MSH6 Mutation, HNPCC	14982	83891, 83892, 83898 x18, 83909 x18, 83904 x18, 83912	83891, 83892 x2, 83898 x18, 83909 x18, 83904 x18, 83912
MSH6 Mutation, One Exon, HNPCC	14983	83891, 83892, 83898, 83909, 83904, 83912	83891, 83892 x2, 83898, 83909, 83904, 83912
Phenylketonuria (PKU) Mutation Analysis	16152	83891, 83892, 83894, 83898 x13, 83904 x13, 83912	83891, 83892 x2, 83894, 83898 x13, 83904 x13, 83912
Plasminogen Activator Inhibitor-1 (PAI-1) 4G/5G Polymorphism	11368	83891, 83898, 83892 x2, 83909, 83914, 83912	83891, 83898, 83892 x3, 83909, 83914, 83912
Rett Syndrome Mutation Analysis	15088	83891, 83892, 83909, 83894, 83898 x6, 83904 x6, 83912	83891, 83892 x2, 83909, 83894, 83898 x6, 83904 x6, 83912
TPMT Genotype	37742	83890, 83900, 83892, 83896 x4, 83912	83890, 83900, 83892 x2, 83896 x4, 83912
von Willebrand Disease Mutation Analysis	19837	83891, 83898 x12, 83892 x12, 83904 x14, 83912	83891, 83898 x12, 83892 x2, 83904 x14, 83912

<b>DLO Test Name</b>	<b>DLO Order Code</b>	<b>2008 CPT Codes</b>	<b>NEW CPT Codes Effective 1/1/2009</b>
von Willebrand Factor Protease Activity with Reflex to Protease Inhibitor	14532	85247	85397
Xsense(TM), Fragile X with Reflex	19757	83891, 83900, 83909, 83894, 83912 If Capillary Electrophoresis performed: 83892 x2, 83909 x8, 83900 x4. If Southern Blot performed: 83891, 83892, 83894, 83897, 83896	83891, 83900, 83909, 83894, 83912 If Capillary Electrophoresis performed: 83892 x2, 83909 x8, 83900 x4. If Southern Blot performed: 83891, 83892 x2, 83894, 83897, 83896