

**New York State Department of Health  
Wadsworth Center**

# **Proficiency Testing Program**

**16-Jan-08**

**DIAGNOSTIC IMMUNOLOGY &  
HUMAN IMMUNODEFICIENCY VIRUS  
SUMMARY ANALYSIS**



**Proficiency Test Event  
16-Jan-08**

**Diagnostic Immunology & Human Immunodeficiency Virus  
Summary Report**

**Steven Bush M.S., Wendy Archinal Ph.D., and Susan Wong Ph.D.**

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## Table of Contents

<b>Review of Grading Policy</b>	Page 3
<b>Determination of Acceptable Responses</b>	Page 4
<b>Qualitative / Quantitative Test Analytes</b>	Page 5 - 27
Antinuclear Ab	Page 5 - 6
Antistreptolysin O	Page 7 - 9
Cytomegalovirus Ab	Page 10
Hepatitis B Core Ab	Page 11
Hepatitis B Surface Ag	Page 12
Hepatitis Be Ag	Page 13
Hepatitis C Ab	Page 13
HIV Ab Screening/ Confirmation	Page 14
HIV p24 Ag	Page 14
HTLV1 Ab	Page 15
Infectious Mononucleosis	Page 16
Lyme Disease ( <u>Borrelia burgdorferi</u> ) Ab	Page 17 - 18
Rheumatoid Factor	Page 19 - 21
Rubella Ab	Page 22 - 23
Rubella IgM	Page 24
Syphilis-Reagin	Page 25 - 26
Syphilis-Treponemal Ab	Page 27
<b>Quantitative Test Analytes</b>	Page 28 - 29
Alpha-1 Antitrypsin	Page 28
Complement C'3	Page 28
Complement C'4	Page 28
Immunoglobulin A	Page 29
Immunoglobulin E	Page 29
Immunoglobulin G	Page 29
Immunoglobulin M	Page 29
<b>Acceptable Responses</b>	Page 30 - 31

The data summarized in this report were tabulated from test results and accompanying information submitted by laboratories that participated in the January 16, 2008 Diagnostic Immunology and Human Immunodeficiency Virus proficiency test events. Participants are encouraged to review the data and to compare results and test kit performances.

Laboratories were evaluated on the basis of their responses for each analyte and on overall performance for all the analytes tested in the permit category. Appropriate responses were determined by participant consensus requiring 80% agreement in each test.

Qualitative/quantitative results were graded in relation to results given by participants for specific test kits. When the number of participants that used a specific test kit was less than 10, results were graded considering results given for the method used. Target values and acceptable ranges were determined as indicated in Page 5.

#### **Grading Criteria:**

- ▶ For each separate analyte where results were reported, qualitative or quantitative, twenty points were deducted for each incorrect answer. For Syphilis-Reagin (RPR), where both qualitative and quantitative results are reported under one analyte, ten points were deducted for each incorrect quantitative or qualitative result. Titering of positive Syphilis-Reagin samples is mandatory for all Diagnostic Services laboratories who perform this test, unless given an exemption. Failure to titer the positive samples to the endpoint will result in failure for the Syphilis-Reagin analyte.
- ▶ For **Diagnostic Services** failure to attain an overall testing score of at least 80% is unsatisfactory performance
- ▶ For **Donor Services** failure to attain an overall testing score of 100% is unsatisfactory performance.
- ▶ For **HIV** failure to attain an overall testing score of 100% is unsatisfactory performance.
- ▶ Laboratories failing two out of three consecutive proficiency test events for an analyte or for the permit category will fail the proficiency testing program for the analyte or for the permit category and may be required to cease patient testing for that analyte/category.

#### **Summary Tables**

Test kit manufacturer names are in *italics*. In some tables, test kits are grouped under test methods shown in bold letters. In all tables, test methods and test kit manufacturer names are listed in alphabetic order. Only the testing systems used by 10 or more laboratories are listed in this report.

For qualitative tests, results are summarized as the number of laboratories that reported a test sample as reactive to the number that reported it as non-reactive. In addition, where test results depend on a quantitative value (e.g. titer, IU/ml) the values reported are given in separate tables. They are expressed, where applicable, as the Mean  $\pm$  S.D. when ten or more laboratories reported data.

For quantitative tests, values reported variously as mg/dl, IU/ml, etc. are given as the Mean  $\pm$  S.D. when ten or more laboratories reported results. Titers are given as endpoint titers.

#### **Disclaimer**

The use of brand and/or trade names in this report does not constitute an endorsement of the products on the part of the Wadsworth Center or the New York State Department of Health.

## Determination of Acceptable Responses

Analyte or Test	Criteria
Alpha-1 Antitrypsin	Target value $\pm$ 3 S.D.
Antinuclear Antibody	Positive or negative
Antinuclear Antibody Quantitative (IFA systems only)	Target value $\pm$ 2 dilutions
Antistreptolysin O	Positive or negative
Antistreptolysin O Quantitative	Target value $\pm$ 2 dilutions or Target value $\pm$ 3 S.D.
Complement C'3, C'4	Target value $\pm$ 3 S.D.
Cytomegalovirus Antibody	Positive or negative
Hepatitis (HbsAg, anti-HBc, HBeAg, and HCAb)	Reactive or nonreactive
HIV 1 Ab, Ag	Reactive or nonreactive
HTLV 1 Ab	Positive or negative
Lyme Disease Ab, WB IgG, IgM	Positive or negative
Immunoglobulin A, E, M	Target value $\pm$ 3 S.D.
Immunoglobulin G	Target value $\pm$ 25 %
Infectious Mononucleosis	Positive or negative
Rheumatoid Factor	Positive or negative
Rheumatoid Factor Quantitative	Target value $\pm$ 2 dilutions or Target value $\pm$ 3 S.D.
Rubella Ab, IgM	Positive or negative or Immune or nonimmune
Rubella Ab Quantitative	Target value $\pm$ 3 S.D.
Syphilis Reagin Antibody	Reactive or nonreactive Target value $\pm$ 1 dilution
Syphilis Treponemal Antibody	Reactive or nonreactive

## Antinuclear Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No.	46 N				47 R				48 N				49 N				50 N			
		<i>Manufacturer</i>	Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%
<b>EIA</b>	<b>46</b>	<b>46</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>46</b>	<b>100%</b>	<b>46</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>46</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>46</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bio-Rad</i>	12	12	100%		0%		0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%
<i>Diamedix</i>	10	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%
<i>Others</i>	24	24	100%		0%		0%	24	100%	24	100%		0%	24	100%		0%	24	100%		0%
<b>IFA</b>	<b>56</b>	<b>56</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>56</b>	<b>100%</b>	<b>56</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>56</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>56</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bio-Rad</i>	14	14	100%		0%		0%	14	100%	14	100%		0%	14	100%		0%	14	100%		0%
<i>Wampole/Zeus</i>	15	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%	15	100%		0%
<i>Others</i>	27	27	100%		0%		0%	27	100%	27	100%		0%	27	100%		0%	27	100%		0%
<b>Multiplexed Bead <sup>1</sup></b>	<b>10</b>	<b>10</b>	<b>100%</b>		0%		0%	9	90%	10	100%		0%	10	100%		0%	10	100%		0%
<b>Other Methods</b>	<b>15</b>	<b>15</b>	<b>100%</b>		0%	1	7%	14	93%	15	100%		0%	15	100%		0%	15	100%		0%
<b>Analyte Total</b>	<b>127</b>	<b>127</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>1</b>	<b>1%</b>	<b>125</b>	<b>98%</b>	<b>127</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>127</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>127</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

<sup>1</sup> One laboratory reported a result of equivocal.

### Antinuclear Antibody Quantitative (IFA systems only)

The number of laboratories that reported titers is listed for positive test sample 47. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method <i>Manufacturer</i>	No. Labs	Sample 47 Titer							
		40	80	160	320	640	1280	2560	5120
<b>IFA</b> <b>Total</b>	80	3	5	20	34	9	3	1	
<i>Bio-Rad</i>	21	1		7	11	1			
<i>The Binding site</i>	17			3	10	3			
<i>Wampole/ Zeus</i>	20	2	4	5	6		2		

**Note:** The number of labs reporting specific titers may not add up to the total number of labs for that system because some labs are not reporting endpoint titers.

### Antinuclear Antibody Staining Patterns

Staining Pattern	Sample 47	
	No. Labs	%
<i>Homogenous</i>	94	96
<i>Nucleolar</i>	2	2
<i>Peripheral</i>		
<i>Speckled</i>	2	2

The reporting of a staining pattern here is for informational purposes only and is not used for grading.

## Antistreptolysin O

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	16 N				17 N				18 N				19 R				20 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Latex Agglutination</b>	<b>74</b>	<b>74</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>74</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>74</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>74</b>	<b>100%</b>	<b>74</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Behring</i>	19	19	100%		0%	19	100%		0%	19	100%		0%		0%	19	100%	19	100%		0%
<i>Fisher</i>	21	21	100%		0%	21	100%		0%	21	100%		0%		0%	21	100%	21	100%		0%
<i>Remel</i>	15	15	100%		0%	15	100%		0%	15	100%		0%		0%	15	100%	15	100%		0%
<i>Others</i>	19	19	100%		0%	19	100%		0%	19	100%		0%		0%	19	100%	19	100%		0%
<b>Nephelometry</b>	<b>13</b>	<b>13</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>13</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>13</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>13</b>	<b>100%</b>	<b>13</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Others</i>	13	13	100%		0%	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%
<b>Hemagglutination</b>	<b>10</b>	<b>10</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>10</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>10</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>10</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Wampole/Zeus</i>	10	10	100%		0%	10	100%		0%	10	100%		0%		0%	10	100%	10	100%		0%
<b>Turbidimetry</b>	<b>11</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Others</i>	11	11	100%		0%	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%
<b>Other Methods</b>	<b>2</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>110</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>110</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## Antistreptolysin O Quantitative Latex Agglutination Procedures

The number of laboratories that reported titers is listed for positive test sample 19. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method	No.	Sample 19					
		200	400	800	1600	3200	6400
<i>Manufacturer</i>	<i>Labs</i>						
<b>Latex</b> <b>Total</b>	57	3	26	15	1		
<i>Dade Behring</i>	17		5	5	1		
<i>Fisher</i>	15	2	9	3			
<i>Remel</i>	13		8	4			

**Note:** The number of labs reporting specific titers may not add up to the total number of labs for that system because some labs are not reporting endpoint titers.

### Antistreptolysin O Quantitative

Results are summarized for positive test sample 19. The Mean values  $\pm$  S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

Method	Manufacturer	No. Labs	Unit	Sample 19
<b>Nephelometry</b>	<b>Total</b>	26	IU/ml	646 $\pm$ 141
	<i>Dade Behring Neph.</i>	14	IU/ml	793 $\pm$ 63
<b>Turbidimetry</b>	<b>Total</b>	26	IU/ml	684 $\pm$ 118
	<i>Roche Diagnostics Cobas</i>	12	IU/ml	736 $\pm$ 52

## Cytomegalovirus Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	11 N				12 R				13 N				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>EIA</b>	<b>37</b>	<b>37</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>37</b>	<b>100%</b>	<b>37</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>37</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>37</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Wampole /Zeus</i>	17	17	100%		0%		0%	17	100%	17	100%		0%	17	100%		0%	17	100%		0%
<i>Others</i>	20	20	100%		0%		0%	20	100%	20	100%		0%	20	100%		0%	20	100%		0%
<b>ELFA</b>	<b>20</b>	<b>20</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>20</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>20</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>20</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>bioMérieux Vidas</i>	20	20	100%		0%		0%	20	100%	20	100%		0%	20	100%		0%	20	100%		0%
<b>Chemiluminescence</b>	<b>14</b>	<b>14</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>14</b>	<b>100%</b>	<b>14</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>14</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>14</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Diagnostic Products</i>	12	12	100%		0%		0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%
<i>Others</i>	2	2	100%		0%		0%	2	100%	2	100%		0%	2	100%		0%	2	100%		0%
<b>Hemagglutination</b>	<b>11</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>11</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Olympus</i>	11	11	100%		0%		0%	11	100%	11	100%		0%	11	100%		0%	11	100%		0%
<b>Other Methods</b>	<b>9</b>	<b>9</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>91</b>	<b>91</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>91</b>	<b>100%</b>	<b>91</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>91</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>91</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## Hepatitis B Core Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	6 N				7 N				8 N				9 N				10 R			
		Manufacturer	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R
<b>Chemiluminescence</b>	<b>93</b>	<b>93</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>93</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>93</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>93</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>93</b>	<b>100%</b>
<i>Abbott</i>	13	13	100%		0%	13	100%		0%	13	100%		0%	13	100%		0%		0%	13	100%
<i>Bayer</i>	33	33	100%		0%	33	100%		0%	33	100%		0%	33	100%		0%		0%	33	100%
<i>Diagnostic Products</i>	21	21	100%		0%	21	100%		0%	21	100%		0%	21	100%		0%		0%	21	100%
<i>Ortho</i>	26	26	100%		0%	26	100%		0%	26	100%		0%	26	100%		0%		0%	26	100%
<b>EIA</b>	<b>51</b>	<b>37</b>	<b>73%</b>	<b>11</b>	<b>22%</b>	<b>37</b>	<b>73%</b>	<b>10</b>	<b>20%</b>	<b>50</b>	<b>98%</b>	<b>0</b>	<b>0%</b>	<b>51</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>51</b>	<b>100%</b>
<i>Abbott AxSYM</i> <sup>1</sup>	20	7	35%	10	50%	7	35%	9	45%	19	95%		0%	20	100%		0%		0%	20	100%
<i>Abbott Corzyme</i>	16	15	94%	1	6%	15	94%	1	6%	16	100%		0%	16	100%		0%		0%	16	100%
<i>DiaSorin</i>	10	10	100%		0%	10	100%		0%	10	100%		0%	10	100%		0%		0%	10	100%
<i>Other</i>	5	5	100%		0%	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%
<b>Other Systems</b>	<b>2</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>
<b>Analyte Total</b>	<b>146</b>	<b>132</b>	<b>90%</b>	<b>11</b>	<b>8%</b>	<b>132</b>	<b>90%</b>	<b>10</b>	<b>7%</b>	<b>145</b>	<b>99%</b>	<b>0</b>	<b>0%</b>	<b>146</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>146</b>	<b>100%</b>

1 A result of equivocal was reported by three labs for Sample #6, four labs for Sample #7 and one lab for Sample #8.

## Hepatitis B Surface Antigen

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	6 N				7 N				8 N				9 N				10 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Chemiluminescence</b>	<b>118</b>	<b>110</b>	<b>93%</b>	<b>8</b>	<b>7%</b>	<b>111</b>	<b>94%</b>	<b>7</b>	<b>6%</b>	<b>110</b>	<b>93%</b>	<b>6</b>	<b>5%</b>	<b>112</b>	<b>95%</b>	<b>4</b>	<b>3%</b>	<b>0</b>	<b>0%</b>	<b>118</b>	<b>100%</b>
<i>Abbott</i>	12	12	100%		0%	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%
<i>Bayer</i>	42	42	100%		0%	42	100%		0%	42	100%		0%	42	100%		0%		0%	42	100%
<i>Diagnostic Products</i>	20	20	100%		0%	20	100%		0%	20	100%		0%	20	100%		0%		0%	20	100%
<i>Ortho</i> <sup>1</sup>	32	25	78%	7	22%	25	78%	7	22%	24	75%	6	19%	26	81%	4	13%		0%	32	100%
<i>Roche</i>	12	11	92%	1	8%	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%
<b>EIA</b>	<b>71</b>	<b>69</b>	<b>97%</b>	<b>2</b>	<b>3%</b>	<b>70</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>70</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>70</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>0</b>	<b>0%</b>	<b>71</b>	<b>100%</b>
<i>Abbott</i>	51	49	96%	2	4%	50	98%	1	2%	50	98%	1	2%	50	98%	1	2%		0%	51	100%
<i>Bio-Rad</i>	14	14	100%		0%	14	100%		0%	14	100%		0%	14	100%		0%		0%	14	100%
<i>Other</i>	6	6	100%		0%	6	100%		0%	6	100%		0%	6	100%		0%		0%	6	100%
<b>Other Methods</b>	<b>9</b>	<b>9</b>	<b>100%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>9</b>	<b>100%</b>
<b>Analyte Total</b>	<b>198</b>	<b>188</b>	<b>95%</b>	<b>10</b>	<b>5%</b>	<b>190</b>	<b>96%</b>	<b>8</b>	<b>4%</b>	<b>189</b>	<b>95%</b>	<b>7</b>	<b>4%</b>	<b>191</b>	<b>96%</b>	<b>5</b>	<b>3%</b>	<b>0</b>	<b>0%</b>	<b>198</b>	<b>100%</b>

<sup>1</sup> An equivocal result was reported by one lab on samples #8 and #9. An N/A was reported by one lab on samples #8 and #9.

## Hepatitis Be Antigen

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	66 N				67 N				68 N				69 N				70 R			
		N		%		N		%		N		%		N		%		N		%	
Manufacturer		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>EIA</b>	<b>28</b>	<b>28</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>28</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>28</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>28</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>28</b>	<b>100%</b>
<i>DiaSorin</i>	27	27	100%		0%	27	100%		0%	27	100%		0%	27	100%		0%		0%	27	100%
<i>Other</i>	1	1	100%		0%	1	100%		0%	1	100%		0%	1	100%		0%		0%	1	100%
<b>Other Methods</b>	<b>4</b>	<b>4</b>	<b>100%</b>		<b>0%</b>	<b>4</b>	<b>100%</b>		<b>0%</b>	<b>4</b>	<b>100%</b>		<b>0%</b>	<b>4</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>4</b>	<b>100%</b>
<b>Analyte Total</b>	<b>32</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>

## Hepatitis C Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	71 R				72 N				73 N				74 N				75 N			
		N		%		N		%		N		%		N		%		N		%	
Manufacturer		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Chemiluminescence</b>	<b>78</b>	<b>0</b>	<b>0%</b>	<b>78</b>	<b>100%</b>	<b>78</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>78</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>78</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>78</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bayer</i>	41		0%	41	100%	41	100%		0%	41	100%		0%	41	100%		0%	41	100%		0%
<i>Ortho</i>	32		0%	32	100%	32	100%		0%	32	100%		0%	32	100%		0%	32	100%		0%
<i>Other</i>	5		0%	5	100%	5	100%		0%	5	100%		0%	5	100%		0%	5	100%		0%
<b>EIA</b>	<b>86</b>	<b>0</b>	<b>0%</b>	<b>86</b>	<b>100%</b>	<b>86</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>86</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>86</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>86</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Abbott</i>	61		0%	61	100%	61	100%		0%	61	100%		0%	61	100%		0%	61	100%		0%
<i>Ortho</i>	24		0%	24	100%	24	100%		0%	24	100%		0%	24	100%		0%	24	100%		0%
<i>Other</i>	1		0%	1	100%	1	100%		0%	1	100%		0%	1	100%		0%	1	100%		0%
<b>Other Methods</b>	<b>7</b>		<b>0%</b>	<b>7</b>	<b>100%</b>	<b>7</b>	<b>100%</b>		<b>0%</b>	<b>7</b>	<b>100%</b>		<b>0%</b>	<b>7</b>	<b>100%</b>		<b>0%</b>	<b>7</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>171</b>	<b>0</b>	<b>0%</b>	<b>171</b>	<b>100%</b>	<b>171</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>171</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>171</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>171</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## HIV Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	31 N				32 N				33 N				34 R				35 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Chemiluminescence</b>	<b>18</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bayer</i>	18	18	100%		0%	18	100%		0%	18	100%		0%		0%	18	100%	18	100%		0%
<b>EIA</b>	<b>110</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>109</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>1</b>	<b>1%</b>	<b>109</b>	<b>99%</b>	<b>110</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Abbott</i>	55	55	100%		0%	55	100%		0%	54	98%	1	2%	1	2%	54	98%	55	100%		0%
<i>Bio-Rad</i>	48	48	100%		0%	48	100%		0%	48	100%		0%		0%	48	100%	48	100%		0%
<i>Others</i>	7	7	100%		0%	7	100%		0%	7	100%		0%		0%	7	100%	7	100%		0%
<b>Rapid EIA</b>	<b>99</b>	<b>99</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>99</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>99</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>22</b>	<b>22%</b>	<b>76</b>	<b>77%</b>	<b>99</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Orasure</i> <sup>1</sup>	99	99	100%		0%	99	100%		0%	99	100%		0%	22	22%	76	77%	99	100%		0%
<b>Rapid Immunoassay</b>	<b>42</b>	<b>42</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>42</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>41</b>	<b>98%</b>	<b>1</b>	<b>2%</b>	<b>7</b>	<b>17%</b>	<b>33</b>	<b>79%</b>	<b>42</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Medmira</i> <sup>1</sup>	15	15	100%		0%	15	100%		0%	15	100%		0%	6	40%	7	47%	15	100%		0%
<i>Trinity</i>	24	24	100%		0%	24	100%		0%	24	100%		0%		0%	24	100%	24	100%		0%
<i>Other</i>	3	3	100%		0%	3	100%		0%	2	67%	1	33%	1	33%	2	67%	3	100%		0%
<b>Western Blot</b>	<b>43</b>	<b>43</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>43</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>42</b>	<b>98%</b>	<b>1</b>	<b>2%</b>	<b>1</b>	<b>2%</b>	<b>41</b>	<b>95%</b>	<b>43</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bio-Rad</i> <sup>1</sup>	40	40	100%		0%	40	100%		0%	39	98%	1	3%	1	3%	38	95%	40	100%		0%
<i>Others</i>	3	3	100%		0%	3	100%		0%	3	100%		0%		0%	3	100%	3	100%		0%
<b>Other Methods</b>	<b>11</b>	<b>11</b>	<b>100%</b>		<b>0%</b>	<b>11</b>	<b>100%</b>		<b>0%</b>	<b>11</b>	<b>100%</b>		<b>0%</b>	<b>6</b>	<b>55%</b>	<b>5</b>	<b>45%</b>	<b>11</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>323</b>	<b>323</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>323</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>320</b>	<b>99%</b>	<b>3</b>	<b>1%</b>	<b>37</b>	<b>11%</b>	<b>282</b>	<b>87%</b>	<b>323</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

<sup>1</sup> Four laboratories reported an equivocal result on Sample #34; two using Medmira, one using Orasure and one using Bio Rad WB.

## HIV p24 Antigen

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	61 N				62 N				63 N				64 R				65 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>EIA</b>	<b>2</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Others</i>	2	2	100%		0%	2	100%		0%	2	100%		0%		0%	2	100%	2	100%		0%
<b>Analyte Total</b>	<b>2</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>100%</b>	<b>2</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## HTLV Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	36 R				37 N				38 N				39 N				40 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>EIA</b>	<b>44</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>
<i>Abbott</i>	30		0%	30	100%	30	100%		0%		0%	30	100%		0%	30	100%		0%	30	100%
<i>bioMérieux</i>	13		0%	13	100%	13	100%		0%		0%	13	100%		0%	13	100%		0%	13	100%
<i>Other</i>	1		0%	1	100%	1	100%		0%		0%	1	100%		0%	1	100%		0%	1	100%
<b>Analyte Total</b>	<b>44</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>

## Infectious Mononucleosis

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method <i>Manufacturer</i>	No. Labs	26 N				27 N				28 R				29 N				30 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>CICA</b>	<b>21</b>	<b>21</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>21</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>21</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>21</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Others</i>	21	21	100%		0%	21	100%		0%		0%	21	100%	21	100%		0%	21	100%		0%
<b>Hemagglutination</b>	<b>50</b>	<b>50</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>50</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>50</b>	<b>100%</b>	<b>49</b>	<b>98%</b>	<b>1</b>	<b>2%</b>	<b>50</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Fisher</i>	20	20	100%		0%	20	100%		0%		0%	20	100%	20	100%		0%	20	100%		0%
<i>Wampole/Zeus</i>	20	20	100%		0%	20	100%		0%		0%	20	100%	19	95%	1	5%	20	100%		0%
<i>Others</i>	10	10	100%		0%	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%
<b>Latex Agglutination</b>	<b>142</b>	<b>142</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>142</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>142</b>	<b>100%</b>	<b>142</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>142</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Fisher</i>	43	43	100%		0%	43	100%		0%		0%	43	100%	43	100%		0%	43	100%		0%
<i>Remel</i>	26	26	100%		0%	26	100%		0%		0%	26	100%	26	100%		0%	26	100%		0%
<i>Wampole/Zeus</i>	52	52	100%		0%	52	100%		0%		0%	52	100%	52	100%		0%	52	100%		0%
<i>Others</i>	21	21	100%		0%	21	100%		0%		0%	21	100%	21	100%		0%	21	100%		0%
<b>Solid Phase IA</b>	<b>62</b>	<b>62</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>62</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>62</b>	<b>100%</b>	<b>62</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>62</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Inverness</i>	30	30	100%		0%	30	100%		0%		0%	30	100%	30	100%		0%	30	100%		0%
<i>Seradyn</i>	26	26	100%		0%	26	100%		0%		0%	26	100%	26	100%		0%	26	100%		0%
<i>Others</i>	6	6	100%		0%	6	100%		0%		0%	6	100%	6	100%		0%	6	100%		0%
<b>Other Methods</b>	<b>2</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>	<b>2</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>277</b>	<b>277</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>277</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>277</b>	<b>100%</b>	<b>276</b>	<b>100%</b>	<b>1</b>	<b>0%</b>	<b>277</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## Lyme Disease Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	41 N				42 N				43 R *				44 N				45 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>EIA</b>	<b>59</b>	<b>59</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>59</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>36</b>	<b>61%</b>	<b>19</b>	<b>32%</b>	<b>59</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>58</b>	<b>98%</b>	<b>0</b>	<b>0%</b>
<i>Immunitics</i> <sup>1</sup>	17	17	100%		0%	17	100%		0%		0%	17	100%	17	100%		0%	16	94%		0%
<i>Wampole /Zeus</i> <sup>2</sup>	29	29	100%		0%	29	100%		0%	24	83%	1	3%	29	100%		0%	29	100%		0%
<i>Others</i>	13	13	100%		0%	13	100%		0%	12	92%	1	8%	13	100%		0%	13	100%		0%
<b>ELFA</b>	<b>29</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>28</b>	<b>97%</b>	<b>1</b>	<b>3%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>bioMérieux</i>	29	29	100%		0%	29	100%		0%	28	97%	1	3%	29	100%		0%	29	100%		0%
<b>Other Methods</b>	13	13	100%		0%	13	100%		0%	9	69%	4	31%	13	100%		0%	13	100%		0%
<b>Analyte Total</b>	<b>101</b>	<b>101</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>101</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>73</b>	<b>72%</b>	<b>24</b>	<b>24%</b>	<b>101</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>100</b>	<b>99%</b>	<b>0</b>	<b>0%</b>

\* Test sample #43 was not authenticated. When a consensus agreement cannot be reached among participants, by regulation requirements, the sample cannot be graded (scored) and all participating laboratories get credit for this sample.

- 1 One laboratory reported a result of equivocal on Sample #45.
- 2 Four laboratories reported a result of equivocal on Sample #43.

### Lyme Western Blot IgG

		Participant Results/ Sample Number																																							
		R = Reactive/ Positive; N = Non-Reactive/ Negative; E = Equivocal/ Indeterminate																																							
Method	No. Labs	41 N								42 N								43 R *								44 N								45 N							
		N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%										
Western Blot - IgG	27	27	100%	0	0%	0	0%	27	100%	0	0%	0	0%	24	89%	2	7%	1	4%	27	100%	0	0%	0	0%	27	100%	0	0%	0	0%										
<i>MarDx</i>	25	25	100%		0%		0%	25	100%		0%		0%	22	88%	2	8%	1	4%	25	100%		0%		0%	25	100%		0%		0%										
<i>Other</i>	2	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%										
Other Methods	3	3	100%		0%		0%	3	100%		0%		0%	2	67%		0%	1	33%	3	100%		0%		0%	3	100%		0%		0%										
<b>Analyte Total</b>	<b>30</b>	<b>30</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>30</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>26</b>	<b>87%</b>	<b>2</b>	<b>7%</b>	<b>2</b>	<b>7%</b>	<b>30</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>30</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>										

### Lyme Western Blot IgM

		Participant Results/ Sample Number																																							
		R = Reactive/ Positive; N = Non-Reactive/ Negative; E = Equivocal/ Indeterminate																																							
Method	No. Labs	41 N								42 N								43 R *								44 N								45 N							
		N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%										
Western Blot - IgM	27	27	100%	0	0%	0	0%	27	100%	0	0%	0	0%	15	56%	2	7%	10	37%	27	100%	0	0%	0	0%	27	100%	0	0%	0	0%										
<i>MarDx</i>	25	25	100%		0%		0%	25	100%		0%		0%	14	56%	2	8%	9	36%	25	100%		0%		0%	25	100%		0%		0%										
<i>Other</i>	2	2	100%		0%		0%	2	100%		0%		0%	1	50%		0%	1	50%	2	100%		0%		0%	2	100%		0%		0%										
Other Methods	2	2	100%		0%		0%	2	100%		0%		0%	1	50%		0%	1	50%	2	100%		0%		0%	2	100%		0%		0%										
<b>Analyte Total</b>	<b>29</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>16</b>	<b>55%</b>	<b>2</b>	<b>7%</b>	<b>11</b>	<b>38%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>29</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>										

\* Test sample #43 was not authenticated. When a consensus agreement cannot be reached among participants, by regulation requirements, the sample cannot be graded (scored) and all participating laboratories get credit for this sample.

## Rheumatoid Factor

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	26 N				27 N				28 N				29 R				30 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Latex Agglutination</b>	<b>109</b>	<b>108</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>108</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>103</b>	<b>94%</b>	<b>6</b>	<b>6%</b>	<b>0</b>	<b>0%</b>	<b>109</b>	<b>100%</b>	<b>108</b>	<b>99%</b>	<b>1</b>	<b>1%</b>
<i>Becton Dickinson</i>	16	16	100%		0%	16	100%		0%	16	100%		0%		0%	16	100%	16	100%		0%
<i>Fisher</i>	42	42	100%		0%	42	100%		0%	41	98%	1	2%		0%	42	100%	42	100%		0%
<i>Wampole/Zeus</i>	13	12	92%	1	8%	12	92%	1	8%	9	69%	4	31%		0%	13	100%	12	92%	1	8%
<i>Others</i>	38	38	100%		0%	38	100%		0%	37	97%	1	3%		0%	38	100%	38	100%		0%
<b>Nephelometry</b>	<b>23</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Beckman</i>	11	11	100%		0%	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%
<i>Behring</i>	12	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%	12	100%		0%
<b>Turbidimetry</b>	<b>23</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Roche</i>	13	13	100%		0%	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%
<i>Others</i>	10	10	100%		0%	10	100%		0%	10	100%		0%		0%	10	100%	10	100%		0%
Other Methods	11	11	100%		0%	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%
<b>Analyte Total</b>	<b>166</b>	<b>165</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>165</b>	<b>99%</b>	<b>1</b>	<b>1%</b>	<b>160</b>	<b>96%</b>	<b>6</b>	<b>4%</b>	<b>0</b>	<b>0%</b>	<b>166</b>	<b>100%</b>	<b>165</b>	<b>99%</b>	<b>1</b>	<b>1%</b>

### Rheumatoid Factor Quantitative Latex Agglutination Procedure

The number of laboratories that reported titers is listed for positive test sample 29. The dilution schemes laboratories used are represented by the letter A and B, testing systems with 10 or more laboratories reporting titers are listed in this table.

<i>Manufacturer</i>	<b>No. Labs</b>	<b>A B</b>	<b>Sample 29 Titer</b>						
			<b>20 2</b>	<b>40 4</b>	<b>80 8</b>	<b>160 16</b>	<b>320 32</b>	<b>640 64</b>	<b>1280 128</b>
<b>Total</b>	80	A B	4	4 1	11 5	21 13	7 2	1	1
<i>Becton Dickenson</i>	13	A B		1	7	2	1		
<i>Fisher</i>	30	A B			2 2	15 7	2 2		

**Note:** The number of labs reporting specific titers may not add up to the total number of labs for that system because some labs are not reporting endpoint titers.

## Rheumatoid Factor Quantitative

Results are summarized for positive test sample 29. The Mean values  $\pm$  S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

<b>Method</b> <i>Manufacturer</i>	<b>No.</b> <b>Labs</b>	<b>Unit</b>	<b>Sample 29</b>
<b>Nephelometry</b> <b>Total</b>	37	IU/ml	262 $\pm$ 30
<i>Beckman Coulter IMMAGE</i>	13	IU/ml	289 $\pm$ 16
<i>Dade Behring Nephelometer</i>	21	IU/ml	248 $\pm$ 25
<b>Turbidimetry</b> <b>Total</b>	51	IU/ml	282 $\pm$ 212
<i>Beckman Coulter Synchron</i>	11	IU/ml	454 $\pm$ 133
<i>Roche Diag. Cobas</i>	14	IU/ml	154 $\pm$ 11

## Rubella Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	11 N				12 R				13 N				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<b>Chemiluminescence</b>	<b>54</b>	<b>54</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>54</b>	<b>100%</b>	<b>54</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>54</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>54</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Bayer</i>	26	26	100%		0%		0%	26	100%	26	100%		0%	26	100%		0%	26	100%		0%
<i>Beckman</i>	12	12	100%		0%		0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%
<i>Diagnostic Products</i>	16	16	100%		0%		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%
<b>EIA</b>	<b>44</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>44</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Abbott</i>	16	16	100%		0%		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%
<i>Diamedix</i>	10	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%
<i>Others</i>	18	18	100%		0%		0%	18	100%	18	100%		0%	18	100%		0%	18	100%		0%
<b>ELFA</b>	<b>32</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>32</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>bioMérieux Vidas</i>	32	32	100%		0%		0%	32	100%	32	100%		0%	32	100%		0%	32	100%		0%
<b>Latex Agglutination</b>	<b>36</b>	<b>36</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>36</b>	<b>100%</b>	<b>36</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>36</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>36</b>	<b>100%</b>	<b>0</b>	<b>0%</b>
<i>Fisher</i>	20	20	100%		0%		0%	20	100%	20	100%		0%	20	100%		0%	20	100%		0%
<i>Others</i>	16	16	100%		0%		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%
<b>Other Methods</b>	<b>12</b>	<b>12</b>	<b>100%</b>		<b>0%</b>		<b>0%</b>	<b>12</b>	<b>100%</b>	<b>12</b>	<b>100%</b>		<b>0%</b>	<b>12</b>	<b>100%</b>		<b>0%</b>	<b>12</b>	<b>100%</b>		<b>0%</b>
<b>Analyte Total</b>	<b>178</b>	<b>178</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>178</b>	<b>100%</b>	<b>178</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>178</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>178</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## Rubella Antibody Quantitative

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Results are summarized for positive test sample 12. The Mean values  $\pm$  S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

Method	No.		
<i>Manufacturer</i>	Labs	Unit	Sample 12
<b>Chemiluminescence</b> <i>Total</i>	50	IU/ml	$85 \pm 16$
<i>Bayer</i>	25	IU/ml	$488 \pm 37$
<i>Diagnostic Products</i>	16	IU/ml	$79 \pm 9$

## Rubella IgM Specific

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	56 N				57 N				58 N				59 R				60 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
<i>Manufacturer</i>																					
<b>EIA</b>	<b>9</b>	9	100%		0%	9	100%		0%	9	100%		0%		0%	9	100%	9	100%		0%
<b>Chemiluminescence</b>	<b>9</b>	9	100%		0%	9	100%		0%	9	100%		0%		0%	9	100%	9	100%		0%
<b>Analyte Total</b>	<b>18</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>18</b>	<b>100%</b>	<b>18</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

## Syphilis - Reagin Antibody

Method <i>Manufacturer</i>		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
		1 R				2 N				3 N				4 N				5 N			
No. Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	
<b>RPR</b>	<b>263</b>	<b>12</b>	<b>5%</b>	<b>249</b>	<b>95%</b>	<b>263</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>263</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>262</b>	<b>100%</b>	<b>1</b>	<b>0%</b>	<b>262</b>	<b>100%</b>	<b>1</b>	<b>0%</b>
<i>ASI</i>	39		0%	39	100%	39	100%		0%	39	100%		0%	39	100%		0%	39	100%		0%
<i>Becton Dickenson</i>	125	1	1%	124	99%	125	100%		0%	125	100%		0%	125	100%		0%	125	100%		0%
<i>Fisher</i> <sup>1</sup>	51	9	18%	41	80%	51	100%		0%	51	100%		0%	51	100%		0%	51	100%		0%
<i>True Medix</i>	16	1	6%	15	94%	16	100%		0%	16	100%		0%	16	100%		0%	16	100%		0%
<i>Wampole/Zeus</i>	21		0%	21	100%	21	100%		0%	21	100%		0%	20	95%	1	5%	20	95%	1	5%
<i>Others</i>	11	1	9%	9	82%	11	100%		0%	11	100%		0%	11	100%		0%	11	100%		0%
<b>Analyte Total</b>	<b>263</b>	<b>12</b>	<b>5%</b>	<b>249</b>	<b>95%</b>	<b>263</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>263</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>262</b>	<b>100%</b>	<b>1</b>	<b>0%</b>	<b>262</b>	<b>100%</b>	<b>1</b>	<b>0%</b>

1 Two laboratories reported an equivocal result on Sample #1.

## Syphilis - Reagin Antibody

### RPR Procedures

The number of laboratories that reported titers is listed for positive test sample 1 for the RPR procedure. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method Manufacturer	No. Labs	Sample 1 Titer					
		1	2	4	8	16	32
<i>Total</i>	225	137	72	4	1	1	1
<i>ASI</i>	25	16	8				
<i>Becton Dickenson</i>	113	72	31	3	1	1	
<i>Fisher</i>	41	20	17	1			1
<i>True Medix</i>	15	10	4				
<i>Wampole/ Zeus</i>	21	15	6				

**Note:** The number of labs reporting specific titers may not add up to the total number of labs for that system because some labs are not reporting endpoint titers.

## Syphilis - Treponemal Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	1 R				2 N				3 N				4 N				5 N			
		<i>Manufacturer</i>	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R
<b>EIA</b>	14	0	0%	14	100%	14	100%	0	0%	14	100%	0	0%	14	100%	0	0%	14	100%	0	0%
<i>Others</i>	14		0%	14	100%	14	100%		0%	14	100%		0%	14	100%		0%	14	100%		0%
<b>Gel. Part. Agglut.</b>	32	0	0%	32	100%	32	100%	0	0%	32	100%	0	0%	32	100%	0	0%	32	100%	0	0%
<i>Fujirebio</i>	32		0%	32	100%	32	100%		0%	32	100%		0%	32	100%		0%	32	100%		0%
<b>IFA</b>	21	0	0%	21	100%	21	100%	0	0%	21	100%	0	0%	21	100%	0	0%	21	100%	0	0%
<i>Wampole/Zeus</i>	21		0%	21	100%	21	100%		0%	21	100%		0%	21	100%		0%	21	100%		0%
<b>Other Methods <sup>1</sup></b>	15		0%	15	100%	8	53%	7	47%	8	53%	7	47%	8	53%	7	47%	8	53%	7	47%
<b>Analyte Total</b>	<b>82</b>	<b>0</b>	<b>0%</b>	<b>82</b>	<b>100%</b>	<b>75</b>	<b>91%</b>	<b>7</b>	<b>9%</b>	<b>75</b>	<b>91%</b>	<b>7</b>	<b>9%</b>	<b>75</b>	<b>91%</b>	<b>7</b>	<b>9%</b>	<b>75</b>	<b>91%</b>	<b>7</b>	<b>9%</b>

1 The expected result for samples #2, 3, 4 and 5 is nonreactive. Laboratories reporting any other result should critically examine their method or test kit/system protocol.

## AAT, C'3, and C'4

The Mean mg/dl  $\pm$  S.D. is given where 10 or more laboratories reported values. Outlier values are omitted.

Analytes	Sample NO.					
	No.	76	77	78	79	80
<b>Alpha-1-Antitrypsin</b>	<b>Labs</b>					
Nephelometry/ <i>Behring Nephelometer</i>	19	12 $\pm$ 1.0	186 $\pm$ 29	346 $\pm$ 51	17 $\pm$ 1.4	98 $\pm$ 8.5
Nephelometry/ <i>Total</i>	27	12 $\pm$ 1.0	175 $\pm$ 31	328 $\pm$ 56	18 $\pm$ 2.0	92 $\pm$ 14
Turbidimetry/ <i>Total</i>	6	< 36	154 $\pm$ 26	306 $\pm$ 54	< 36	81 $\pm$ 16
<b>Complement C'3</b>		76	77	78	79	80
Nephelometry/ <i>Beckman Coulter IMMAGE</i>	16	35 $\pm$ 2.0	258 $\pm$ 13	317 $\pm$ 17	23 $\pm$ 2.3	68 $\pm$ 6.0
Nephelometry/ <i>Behring Nephelometer</i>	15	34 $\pm$ 2.3	252 $\pm$ 23	448 $\pm$ 51	23 $\pm$ 1.5	77 $\pm$ 5.1
Turbidimetry/ <i>Roche Cobas Integra</i>	13	35 $\pm$ 2.1	253 $\pm$ 10	321 $\pm$ 13	22 $\pm$ 1.5	66 $\pm$ 5.3
Nephelometry/ <i>Total</i>	45	35 $\pm$ 2.1	251 $\pm$ 18	383 $\pm$ 72	23 $\pm$ 1.5	74 $\pm$ 5.5
Turbidimetry/ <i>Total</i>	49	36 $\pm$ 3.1	256 $\pm$ 14	333 $\pm$ 14	23 $\pm$ 2.6	67 $\pm$ 4.9
<b>Complement C'4</b>		76	77	78	79	80
Nephelometry/ <i>Beckman Coulter IMMAGE</i>	16	3.7 $\pm$ 0.4	71 $\pm$ 5.5	69 $\pm$ 6.6	4.2 $\pm$ 0.4	14 $\pm$ 0.7
Nephelometry/ <i>Behring Nephelometer</i>	15	3.8 $\pm$ 0.3	63 $\pm$ 5.2	89 $\pm$ 9.1	3.8 $\pm$ 0.3	13 $\pm$ 0.8
Turbidimetry/ <i>Roche Cobas Integra</i>	13	< 6	58 $\pm$ 6.4	45 $\pm$ 4.6	< 6	11 $\pm$ 1.0
Nephelometry/ <i>Total</i>	45	< 10	64 $\pm$ 8.0	77 $\pm$ 12	< 10	13 $\pm$ 0.9
Turbidimetry/ <i>Total</i>	40	< 8	56 $\pm$ 7.0	47 $\pm$ 3.8	< 8	11 $\pm$ 1.5

## IgA, IgE, IgG, and IgM

The Mean mg/dl (IU/ml for IgE)  $\pm$  S.D. is given for IgA, IgE, and IgM and Mean mg/dl  $\pm$  25% is given for IgG where 10 or more laboratories reported values. Outlier values are omitted.

Analytes (Unit)	No.	Sample NO.					
		Labs	81	82	83	84	85
<b>Immunoglobulin A (mg/dl)</b>							
Nephelometry/Beckman Coulter IMMAGE	18		47 $\pm$ 2.2	618 $\pm$ 36	46 $\pm$ 1.9	298 $\pm$ 18	53 $\pm$ 1.9
Nephelometry/Behring Nephelometer	18		49 $\pm$ 3.0	671 $\pm$ 50	48 $\pm$ 3.5	314 $\pm$ 19	62 $\pm$ 2.9
Nephelometry/Behring BN Prospec	10		49 $\pm$ 1.3	695 $\pm$ 50	50 $\pm$ 4.5	298 $\pm$ 11	62 $\pm$ 1.7
Turbidimetry/ Beckman Coulter Synchron	10		51 $\pm$ 3.3	567 $\pm$ 25	51 $\pm$ 3.5	291 $\pm$ 13	57 $\pm$ 4.1
Turbidimetry/ Roche Cobas Integra	14		47 $\pm$ 2.4	533 $\pm$ 16	46 $\pm$ 2.4	298 $\pm$ 4.7	46 $\pm$ 2.6
Nephelometry/ Total	56		48 $\pm$ 2.9	641 $\pm$ 66	48 $\pm$ 3.0	306 $\pm$ 18	58 $\pm$ 4.9
Turbidimetry/ Total	54		49 $\pm$ 3.6	526 $\pm$ 43	48 $\pm$ 3.9	292 $\pm$ 11	53 $\pm$ 6.2
<b>Immunoglobulin E (IU/ml)</b>							
Chemiluminescence/Bayer Advia	10		27 $\pm$ 1.9	411 $\pm$ 21	27 $\pm$ 2.2	400 $\pm$ 26	3.4 $\pm$ 2.0
Chemiluminescence/Diag. Prod. Co.	31		29 $\pm$ 2.2	381 $\pm$ 39	28 $\pm$ 2.6	414 $\pm$ 31	3.4 $\pm$ 0.4
FEIA/ Pharmacia Immunocap	10		29 $\pm$ 2.3	416 $\pm$ 42	28 $\pm$ 1.9	395 $\pm$ 24	4.5 $\pm$ 0.7
Chemiluminescence/ Total	48		29 $\pm$ 2.3	391 $\pm$ 37	28 $\pm$ 2.5	407 $\pm$ 30	3.4 $\pm$ 0.4
FEIA/ Total	16		29 $\pm$ 2.0	412 $\pm$ 35	28 $\pm$ 1.7	387 $\pm$ 2.1	4.8 $\pm$ 0.7
<b>Immunoglobulin G (mg/dl)</b>							
Nephelometry/Beckman Coulter IMMAGE	17		255 $\pm$ 17	2310 $\pm$ 137	258 $\pm$ 14	1031 $\pm$ 66	294 $\pm$ 14
Nephelometry/Behring BN Prospec	10		263 $\pm$ 8.1	2855 $\pm$ 127	268 $\pm$ 8.1	1105 $\pm$ 47	312 $\pm$ 8.4
Nephelometry/Behring Nephelometer	18		271 $\pm$ 17	2900 $\pm$ 168	266 $\pm$ 13	1112 $\pm$ 42	317 $\pm$ 14
Turbidimetry/Roche Cobas Integra	14		229 $\pm$ 8.5	2404 $\pm$ 46	237 $\pm$ 11	974 $\pm$ 21	258 $\pm$ 16
Nephelometry/ Total	55		261 $\pm$ 17	2616 $\pm$ 334	262 $\pm$ 14	1073 $\pm$ 70	304 $\pm$ 19
Turbidimetry/ Total	50		238 $\pm$ 21	2337 $\pm$ 186	241 $\pm$ 21	980 $\pm$ 28	276 $\pm$ 23
<b>Immunoglobulin M (mg/dl)</b>							
Nephelometry/Beckman Coulter IMMAGE	17		25 $\pm$ 1.8	206 $\pm$ 12	25 $\pm$ 2.4	140 $\pm$ 6.6	22 $\pm$ 1.8
Nephelometry/Behring Nephelometer	19		25 $\pm$ 1.5	325 $\pm$ 18	25 $\pm$ 2.2	163 $\pm$ 8.4	23 $\pm$ 2.0
Turbidimetry/Roche Cobas Integra	14		21 $\pm$ 3.3	162 $\pm$ 7.7	22 $\pm$ 2.6	135 $\pm$ 5.0	17 $\pm$ 2.3
Nephelometry/ Total	54		25 $\pm$ 1.8	272 $\pm$ 55	25 $\pm$ 2.5	154 $\pm$ 12	22 $\pm$ 2.0
Turbidimetry/ Total	50		26 $\pm$ 4.7	192 $\pm$ 30	26 $\pm$ 3.7	140 $\pm$ 10	23 $\pm$ 6.4

**Acceptable Response (January 16, 2008 PT Event)**  
**Quantitative Tests Results (Acceptable Range)**

Analytes Method/ Manufacture	Sample NO.				
	76	77	78	79	80
<b>Alpha-1-Antitrypsin</b>	76	77	78	79	80
Nephelometry/Dade Behring Neph.	8 - 15	98 - 275	192 - 499	13 - 22	72 - 124
Nephelometry/ Total	8 - 15	81 - 268	161 - 495	12 - 24	49 - 134
Turbidimetry/ Total	< 36	77 - 232	142 - 470	< 36	33 - 129
<b>Complement C'3</b>	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	28 - 41	219 - 297	267 - 368	15 - 30	50 - 87
Nephelometry/Dade Behring Neph.	27 - 42	184 - 320	294 - 602	18 - 28	61 - 93
Turbidimetry/Roche Cobas Integra	28 - 42	222 - 283	281 - 361	18 - 27	50 - 83
Nephelometry/ Total	28 - 42	195 - 306	168 - 598	18 - 28	57 - 91
Turbidimetry/ Total	26 - 45	213 - 299	289 - 377	15 - 31	52 - 82
<b>Complement C'4</b>	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	2 - 5	54 - 88	49 - 89	3 - 6	11 - 16
Nephelometry/Dade Behring Neph.	2 - 5	47 - 79	61 - 117	2 - 5	10 - 15
Turbidimetry/Roche Cobas Integra	< 6	38 - 77	30 - 59	< 6	7-14
Nephelometry/ Total	< 10	39 - 88	40 - 114	< 10	10 - 16
Turbidimetry/ Total	< 8	35 - 77	35 - 59	< 8	6 - 16
<b>Immunoglobulin A</b>	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	40 - 54	510 - 725	40 - 53	244 - 351	47 - 59
Nephelometry/Dade Behring Neph .	40 - 59	522 - 820	37 - 59	256 - 371	52 - 71
Nephelometry/Dade Behring BN P.	45 - 54	442 - 839	37 - 59	257 - 371	53 - 71
Turbidimetry/ Beckman Coulter Synch.	41 - 61	491 - 644	40 - 62	252 - 330	44 - 70
Turbidimetry/ Roche Cobas Integra	40 - 55	483 - 583	38 - 54	283 - 312	38 - 55
Nephelometry/ Total	39 - 58	442 - 839	39 - 58	252 - 360	43 - 73
Turbidimetry/ Total	37 - 60	396 - 656	36 - 60	259 - 326	34 - 72
<b>Immunoglobulin E</b>	81	82	83	84	85
Chemiluminescence/Bayer Advia	21 - 33	348 - 475	20 - 34	322 - 479	< 6
Chemiluminescence/Diag.Prod. Immulite	22 - 37	263 - 499	20 - 37	321 - 507	2 - 5
FEIA/Pharmacia Immunocap	22 - 37	290 - 542	22 - 35	321 - 468	2 - 7
Chemiluminescence/ Total	21 - 36	282 - 500	20 - 36	315 - 499	2 - 5
FEIA/ Total	22 - 35	306 - 517	22 - 33	315 - 460	2 - 8
Nephelometry/ Total	19 - 36	288 - 541	17 - 38	281 - 519	1 - 7
<b>Immunoglobulin G</b>	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	191 - 319	1732 - 2888	193 - 323	773 - 1290	220 - 368
Nephelometry/Dade Behring Neph .	203 - 339	2174 - 3624	199 - 333	833 - 1390	238 - 397
Nephelometry/Dade Behring BN P.	197 - 330	2141 - 3569	200 - 335	828 - 1382	234 - 391
Turbidimetry/Roche Cobas Integra	171 - 287	1803 - 3005	177 - 296	730 - 1218	193 - 322
Nephelometry/ Total	195 - 326	1962 - 3271	196 - 328	805 - 1342	228 - 381
Turbidimetry/ Total	178 - 299	1752 - 2922	181 - 302	735 - 1226	207 - 346
<b>Immunoglobulin M</b>	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	19 - 31	171 - 242	17 - 32	120 - 160	16 - 27
Nephelometry/Dade Behring Neph .	20 - 30	271 - 378	18 - 32	138 - 189	16 - 29
Turbidimetry/Roche Cobas Integra	11 - 32	138 - 186	14 - 30	119 - 150	9 - 24
Nephelometry/ Total	19 - 31	107 - 436	17 - 33	117 - 191	16 - 29
Turbidimetry/ Total	12 - 41	101 - 283	14 - 38	109 - 171	3 - 43

**Acceptable Response (January 16, 2008 PT Event)  
Qualitative / Quantitative Tests Results**

Analytes	Sample NO.				
	1	2	3	4	5
<b>Syphilis - Reagin</b>	R	N	N	N	N
<i>RPR Titer</i>	1 - 4				
<b>Syphilis - Treponemal</b>	R	N	N	N	N
	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>HBcAb</b>	N	N	N	N	R
<b>HBsAg</b>	N	N	N	N	R
	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>CMV</b>	N	R	N	N	N
<b>Rubella Ab</b>	N	R	N	N	N
<b>Rubella Ab Quantitative</b> <i>IU/ml</i>		20 - 140			
	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>ASO</b>	N	N	N	R	N
<b>ASO Quantitative</b> <i>Latex IU/ml</i>				100 - 1600	
<i>Nephelometry IU/ml</i>				222 - 1070	
<i>Turbidimetry IU/ml</i>				329 - 1041	
	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>Infectious Mono.</b>	N	N	R	N	N
<b>Rheumatoid Factor</b>	N	N	N	R	N
<b>RF Quantitative</b> <i>Latex Titer</i>				4 - 64	
<i>Latex IU/ml</i>				20 - 640	
<i>Nephelometry IU/ml</i>				173 - 352	
<i>Turbidimetry IU/ml</i>				98 - 218	
	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>
<b>HIV Ab Screening/Confirmation</b>	N	N	N	R	N
	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
<b>HTLV 1 Ab</b>	R	N	N	N	N
	<b>41</b>	<b>42</b>	<b>43 *</b>	<b>44</b>	<b>45</b>
<b>LYME Disease Ab</b>	N	N	R	N	N
<b>LYME Disease Ab WB IgG</b>	N	N	R	N	N
<b>LYME Disease Ab WB IgM</b>	N	N	R	N	N
	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
<b>ANA</b>	N	R	N	N	N
<i>IFA Titer</i>		40 - 1280			
	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>
<b>Rubella IgM</b>	N	N	N	R	N
	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>
<b>HIV p24 Ag</b>	N	N	N	R	N
	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>
<b>HBeAg</b>	N	N	N	N	R
	<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>
<b>Hepatitis C Ab</b>	R	N	N	N	N

Note: R = Reactive/ Positive; I = Indeterminate; N = Non-Reactive/ Negative

\* This test sample was not authenticated, because a consensus of 80% agreement was not reached. All participating laboratories received credit for this sample.