

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

Proficiency Testing Program

9-May-07

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

**Proficiency Test Event
9-May-07**

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

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The data summarized in this report were tabulated from test results and accompanying information submitted by laboratories that participated in the May 9, 2007 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:

- ⊕ When both qualitative and quantitative results were reported ten points were deducted for each incorrect result. When only qualitative OR quantitative results were reported twenty points were deducted for each incorrect result.
- ⊕ 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
- ⊕ 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	Target value \pm 2 dilutions or positive or negative
Antistreptolysin O	Target value \pm 2 dilutions or Target value \pm 3 S.D. or positive or negative
Complement C'3, C'4	Target value \pm 3 S.D.
Cytomegalovirus Antibody	Reactive / nonreactive
Hepatitis (HbsAg, anti-HBc, HBeAg, and HCAb)	Reactive / nonreactive
HIV 1 Ab, Ag	Reactive / nonreactive
HTLV 1 Ab (EIA Ab, WB)	Reactive / nonreactive
Lyme Disease Ab, WB IgG, IgM	Reactive / nonreactive
Immunoglobulin A, E, M	Target value \pm 3 S.D.
Immunoglobulin G	Target value \pm 25 %
Infectious Mononucleosis	Target value \pm 2 dilutions or positive or negative
Rheumatoid Factor	Target value \pm 2 dilutions or Target value \pm 3 S.D. or positive or negative
Rubella Ab, IgM	Target value \pm 2 dilutions or Target value \pm 3 S.D. or positive or negative or Immune or nonimmune
Syphilis Reagin Antibody	Target value \pm 1 dilution
Syphilis Treponemal Antibody	Reactive / nonreactive

Antinuclear Antibody

		Participant Results/ Sample Number																				
		R = Reactive/ Positive; N = Non-Reactive/ Negative																				
Method	No. Labs	46 R				47 N				48 N				49 N				50 N				
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	
EIA	49	0	0%	49	100%	49	100%	0	0%	48	98%	1	2%	47	96%	2	4%	48	98%	1	2%	
	<i>Diamedix</i>	12	0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%	12	100%		0%	
	<i>Wampole/Zeus</i>	10	0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%	10	100%		0%	
	<i>Others</i>	27	0%	27	100%	27	100%		0%	26	96%	1	4%	25	93%	2	7%	26	96%	1	4%	
IFA	79	3	4%	76	96%	77	97%	2	3%	77	97%	2	3%	79	100%	0	0%	79	100%	0	0%	
	<i>Bio-Rad</i>	24	1	4%	23	96%	23	96%	1	4%	24	100%		0%	24	100%		0%	24	100%		0%
	<i>The Binding Site</i>	11		0%	11	100%	11	100%		0%	11	100%		0%	11	100%		0%	11	100%		0%
	<i>Wampole/Zeus</i>	21	2	10%	19	90%	20	95%	1	5%	19	90%	2	10%	21	100%		0%	21	100%		0%
	<i>Others</i>	23		0%	23	100%	23	100%		0%	23	100%		0%	23	100%		0%	23	100%		0%
Other Methods	12		0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%	12	100%		0%	
Analyte Total	140	3	2%	137	98%	138	99%	2	1%	137	98%	3	2%	138	99%	2	1%	139	99%	1	1%	

Note: Of the 94 laboratories reporting staining patterns: 3% found test sample 46 to stain speckled, and 97% found sample 46 to stain Homogenous. Several labs reported more than one staining pattern for the sample, we were only able to record the first pattern listed on the result form. The reporting of a staining pattern here is for informational purposes only and is not used for grading.

Antinuclear Antibody

The number of laboratories that reported titers is listed for positive test sample 46. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method	No. Labs	Sample 46							
		Titer							
Manufacturer		40	80	160	320	640	1280	2560	5120
IFA	Total	73	1	14	23	20	9	3	1
	<i>Bio-Rad</i>	24		6	10	6	1		
	<i>Wampole/ Zeus</i>	19	1	2	7	3	2	1	
	<i>The Binding site</i>	11		3	2	3	1	1	1

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

Method <i>Manufacturer</i>		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
		16 N				17 R				18 N				19 N				20 N			
No. Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	
Latex Agglutination	81	80	99%	1	1%	1	1%	80	99%	81	100%	0	0%	81	100%	0	0%	80	99%	1	1%
<i>Behring</i>	18	18	100%		0%		0%	18	100%	18	100%		0%	18	100%		0%	18	100%		0%
<i>Fisher</i>	25	25	100%		0%		0%	25	100%	25	100%		0%	25	100%		0%	25	100%		0%
<i>Remel</i>	15	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%	15	100%		0%
<i>Others</i>	23	22	96%	1	4%	1	4%	22	96%	23	100%		0%	23	100%		0%	22	96%	1	4%
Nephelometry	26	26	100%	0	0%	0	0%	26	100%	26	100%	0	0%	26	100%	0	0%	26	100%	0	0%
<i>Beckman</i>	11	11	100%		0%		0%	11	100%	11	100%		0%	11	100%		0%	11	100%		0%
<i>Behring</i>	15	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%	15	100%		0%
Turbidimetry	25	25	100%	0	0%	0	0%	25	100%	25	100%	0	0%	25	100%	0	0%	25	100%	0	0%
<i>Roche Diagnostics</i>	15	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%	15	100%		0%
<i>Others</i>	10	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%
Other Methods	10	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%
Analyte Total	142	141	99%	1	1%	1	1%	141	99%	142	100%	0	0%	142	100%	0	0%	141	99%	1	1%

**Antistreptolysin O
Latex Agglutination Procedures**

The number of laboratories that reported titers is listed for positive test sample 17. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method	No.	Sample 17						
		200	400	800	Titer	3200	6400	
Manufacturer	Labs				1600			
Latex	Total	61	5	34	8	1		
	<i>Dade Behring</i>	15		5	5			
	<i>Fisher</i>	19	1	13	2	1		
	<i>Remel</i>	12		11	1			

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

Results are summarized for positive test sample 17. 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 17
Nephelometry				
	<i>Dade Behring Neph.</i>	15	IU/ml	805 \pm 66
Turbidimetry				
	<i>Roche Diagnostics Cobas</i>	11	IU/ml	750 \pm 44

Cytomegalovirus Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	11 R				12 N				13 R				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	39	0	0%	39	100%	39	100%	0	0%	1	3%	38	97%	39	100%	0	0%	39	100%	0	0%
<i>Diamedix</i>	10		0%	10	100%	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%
<i>Wampole /Zeus</i>	17		0%	17	100%	17	100%		0%		0%	17	100%	17	100%		0%	17	100%		0%
<i>Others</i>	12		0%	12	100%	12	100%		0%	1	8%	11	92%	12	100%		0%	12	100%		0%
ELFA	21	0	0%	21	100%	21	100%	0	0%	0	0%	21	100%	21	100%	0	0%	21	100%	0	0%
<i>bioMérieux Vidas</i>	21		0%	21	100%	21	100%		0%		0%	21	100%	21	100%		0%	21	100%		0%
Chemiluminescence	18	0	0%	18	100%	17	94%	1	6%	0	0%	18	100%	18	100%	0	0%	17	94%	0	0%
<i>Diagnostic Products</i> ¹	16		0%	16	100%	15	94%	1	6%		0%	16	100%	16	100%		0%	15	94%		0%
<i>Others</i>	2		0%	2	100%	2	100%		0%		0%	2	100%	2	100%		0%	2	100%		0%
Hemagglutination	11	0	0%	11	100%	11	100%	0	0%	0	0%	11	100%	11	100%	0	0%	11	100%	0	0%
<i>Olympus</i>	11		0%	11	100%	11	100%		0%		0%	11	100%	11	100%		0%	11	100%		0%
Other Methods	6		0%	6	100%	5	83%	1	17%		0%	6	100%	6	100%		0%	6	100%		0%
Analyte Total	95	0	0%	95	100%	93	98%	2	2%	1	1%	94	99%	95	100%	0	0%	94	99%	0	0%

¹ One laboratory reported a result of equivocal/indeterminate on sample #15

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 R				10 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	88	88	100%	0	0%	88	100%	0	0%	88	100%	0	0%	1	1%	87	99%	88	100%	0	0%
<i>Abbott</i>	12	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%	12	100%		0%
<i>Bayer</i>	26	26	100%		0%	26	100%		0%	26	100%		0%		0%	26	100%	26	100%		0%
<i>Diagnostic Products</i>	25	25	100%		0%	25	100%		0%	25	100%		0%	1	4%	24	96%	25	100%		0%
<i>Ortho</i>	25	25	100%		0%	25	100%		0%	25	100%		0%		0%	25	100%	25	100%		0%
EIA	64	64	100%	0	0%	64	100%	0	0%	64	100%	0	0%	0	0%	64	100%	63	98%	1	2%
<i>Abbott</i>	48	48	100%		0%	48	100%		0%	48	100%		0%		0%	48	100%	48	100%		0%
<i>DiaSorin</i>	11	11	100%		0%	11	100%		0%	11	100%		0%		0%	11	100%	10	91%	1	9%
<i>Other</i>	5	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%	5	100%		0%
Other Methods	8	8	100%		0%	8	100%		0%	8	100%		0%		0%	8	100%	8	100%		0%
Analyte Total	160	160	100%	0	0%	160	100%	0	0%	160	100%	0	0%	1	1%	159	99%	159	99%	1	1%

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 R				10 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	104	104	100%	0	0%	104	100%	0	0%	104	100%	0	0%	0	0%	104	100%	104	100%	0	0%
<i>Abbott</i>	12	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%	12	100%		0%
<i>Bayer</i>	34	34	100%		0%	34	100%		0%	34	100%		0%		0%	34	100%	34	100%		0%
<i>Diagnostic Products</i>	26	26	100%		0%	26	100%		0%	26	100%		0%		0%	26	100%	26	100%		0%
<i>Ortho</i>	32	32	100%		0%	32	100%		0%	32	100%		0%		0%	32	100%	32	100%		0%
EIA	100	100	100%	0	0%	100	100%	0	0%	100	100%	0	0%	0	0%	100	100%	99	99%	1	1%
<i>Abbott</i>	56	56	100%		0%	56	100%		0%	56	100%		0%		0%	56	100%	55	98%	1	2%
<i>Bio-Rad</i>	14	14	100%		0%	14	100%		0%	14	100%		0%		0%	14	100%	14	100%		0%
<i>Roche</i>	11	11	100%		0%	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%
<i>Abbott AxSYM (MEIA)</i>	13	13	100%		0%	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%
<i>Other</i>	6	6	100%		0%	6	100%		0%	6	100%		0%		0%	6	100%	6	100%		0%
Other Methods	2	2	100%		0%	2	100%		0%	2	100%		0%		0%	2	100%	2	100%		0%
Analyte Total	206	206	100%	0	0%	206	100%	0	0%	206	100%	0	0%	0	0%	206	100%	205	100%	1	0%

Hepatitis Be Antigen

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	66 N				67 N				68 R				69 R				70 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	28	28	100%	0	0%	28	100%	0	0%	0	0%	28	100%	0	0%	28	100%	28	100%	0	0%
<i>DiaSorin</i>	28	28	100%		0%	28	100%		0%		0%	28	100%		0%	28	100%	28	100%		0%
Other Methods	5	5	100%		0%	5	100%		0%		0%	5	100%		0%	5	100%	5	100%		0%
Analyte Total	33	33	100%	0	0%	33	100%	0	0%	0	0%	33	100%	0	0%	33	100%	33	100%	0	0%

Hepatitis C Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	71 N				72 N				73 R				74 N				75 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	69	69	100%	0	0%	69	100%	0	0%	0	0%	68	99%	69	100%	0	0%	1	1%	68	99%
<i>Bayer</i>	34	34	100%		0%	34	100%		0%		0%	34	100%	34	100%		0%	1	3%	33	97%
<i>Ortho</i> ¹	34	34	100%		0%	34	100%		0%		0%	33	97%	34	100%		0%		0%	34	100%
<i>Other</i>	1	1	100%		0%	1	100%		0%		0%	1	100%	1	100%		0%		0%	1	100%
EIA	85	85	100%	0	0%	85	100%	0	0%	2	2%	80	94%	84	99%	1	1%	0	0%	85	100%
<i>Abbott</i> ²	57	57	100%		0%	57	100%		0%	2	4%	53	93%	56	98%	1	2%		0%	57	100%
<i>Ortho</i> ¹	28	28	100%		0%	28	100%		0%		0%	27	96%	28	100%		0%		0%	28	100%
MEIA	22	22	100%	0	0%	22	100%	0	0%	0	0%	20	91%	22	100%	0	0%	0	0%	22	100%
<i>Abbott</i> ²	22	22	100%		0%	22	100%		0%		0%	20	91%	22	100%		0%		0%	22	100%
Other Methods ¹	1	1	100%		0%	1	100%		0%		0%		0%	1	100%		0%		0%	1	100%
Analyte Total	177	177	100%	0	0%	177	100%	0	0%	2	1%	168	95%	176	99%	1	1%	1	1%	176	99%

¹ One laboratory reported a result of equivocal/indeterminate on sample #73.

² Two laboratories reported a result of equivocal/indeterminate on sample #73.

HIV Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	31 R				32 N				33 R				34 N				35 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	124	0	0%	124	100%	123	99%	1	1%	0	0%	124	100%	123	99%	1	1%	124	100%	0	0%
<i>Abbott</i>	67		0%	67	100%	67	100%		0%		0%	67	100%	67	100%		0%	67	100%		0%
<i>bioMérieux</i>	15		0%	15	100%	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%
<i>Bio-Rad</i>	42		0%	42	100%	41	98%	1	2%		0%	42	100%	41	98%	1	2%	42	100%		0%
Rapid EIA	96	1	1%	95	99%	96	100%	0	0%	1	1%	95	99%	96	100%	0	0%	95	99%	1	1%
<i>Orasure</i>	96	1	1%	95	99%	96	100%		0%	1	1%	95	99%	96	100%		0%	95	99%	1	1%
Rapid Immunoassay	41	0	0%	41	100%	41	100%	0	0%	0	0%	41	100%	41	100%	0	0%	41	100%	0	0%
<i>Medmira</i>	19		0%	19	100%	19	100%		0%		0%	19	100%	19	100%		0%	19	100%		0%
<i>Trinity</i>	19		0%	19	100%	19	100%		0%		0%	19	100%	19	100%		0%	19	100%		0%
<i>Other</i>	3		0%	3	100%	3	100%		0%		0%	3	100%	3	100%		0%	3	100%		0%
Western Blot	44	0	0%	44	100%	44	100%	0	0%	0	0%	44	100%	44	100%	0	0%	44	100%	0	0%
<i>Bio-Rad</i> ¹	40		0%	40	100%	40	100%		0%		0%	40	100%	40	100%		0%	40	100%		0%
<i>Others</i>	4		0%	4	100%	4	100%		0%		0%	4	100%	4	100%		0%	4	100%		0%
Other Methods	4		0%	4	100%	4	100%		0%		0%	4	100%	4	100%		0%	4	100%		0%
Analyte Total	309	1	0%	308	100%	308	100%	1	0%	1	0%	308	100%	308	100%	1	0%	308	100%	1	0%

HIV p24 Antigen

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

HTLV Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	36 N				37 N				38 R				39 N				40 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	46	46	100%	0	0%	46	100%	0	0%	0	0%	46	100%	46	100%	0	0%	46	100%	0	0%
<i>Abbott</i>	31	31	100%		0%	31	100%		0%		0%	31	100%	31	100%		0%	31	100%		0%
<i>bioMérieux</i>	15	15	100%		0%	15	100%		0%		0%	15	100%	15	100%		0%	15	100%		0%
Other Methods	0																				
Analyte Total	46	46	100%	0	0%	46	100%	0	0%	0	0%	46	100%	46	100%	0	0%	46	100%	0	0%

Infectious Mononucleosis

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	26 N				27 N				28 N				29 N				30 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
CICA	27	27	100%	0	0%	27	100%	0	0%	27	100%	0	0%	27	100%	0	0%	0	0%	27	100%
<i>Others</i>	27	27	100%		0%	27	100%		0%	27	100%		0%	27	100%		0%		0%	27	100%
Hemagglutination	47	46	98%	1	2%	46	98%	1	2%	47	100%	0	0%	47	100%	0	0%	0	0%	47	100%
<i>Fisher</i>	17	17	100%		0%	17	100%		0%	17	100%		0%	17	100%		0%		0%	17	100%
<i>Wampole/Zeus</i>	21	20	95%	1	5%	20	95%	1	5%	21	100%		0%	21	100%		0%		0%	21	100%
<i>Others</i>	9	9	100%		0%	9	100%		0%	9	100%		0%	9	100%		0%		0%	9	100%
Latex Agglutination	147	147	100%	0	0%	147	100%	0	0%	146	99%	1	1%	147	100%	0	0%	0	0%	147	100%
<i>Fisher</i>	47	47	100%		0%	47	100%		0%	47	100%		0%	47	100%		0%		0%	47	100%
<i>Remel</i>	26	26	100%		0%	26	100%		0%	26	100%		0%	26	100%		0%		0%	26	100%
<i>Wampole/Zeus</i>	53	53	100%		0%	53	100%		0%	53	100%		0%	53	100%		0%		0%	53	100%
<i>Others</i>	21	21	100%		0%	21	100%		0%	20	95%	1	5%	21	100%		0%		0%	21	100%
Solid Phase IA	61	61	100%	0	0%	61	100%	0	0%	61	100%	0	0%	60	98%	1	2%	0	0%	61	100%
<i>Inverness</i>	19	19	100%		0%	19	100%		0%	19	100%		0%	19	100%		0%		0%	19	100%
<i>Seradyn</i>	24	24	100%		0%	24	100%		0%	24	100%		0%	23	96%	1	4%		0%	24	100%
<i>Wampole/Zeus</i>	12	12	100%		0%	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%
<i>Others</i>	6	6	100%		0%	6	100%		0%	6	100%		0%	6	100%		0%		0%	6	100%
Other Methods	5	5	100%		0%	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%
Analyte Total	287	286	100%	1	0%	286	100%	1	0%	286	100%	1	0%	286	100%	1	0%	0	0%	287	100%

Infectious Mononucleosis Latex Agglutination Procedures

The number of laboratories that reported titers are summarized for positive test sample 30. The dilution schemes laboratories used are represented by the letter A and B. Only methods with 10 or more laboratories reporting titers are listed in this table.

Method	No. Labs	Sample 30							
		A	2	4	8	Titer 16	32	64	128
Latex Agglutination	15	B	7	14	28	56			
					4	4			1
			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.

Lyme Disease Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	41 N				42 R				43 N				44 R				45 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	67	67	100%	0	0%	0	0%	66	99%	67	100%	0	0%	0	0%	67	100%	67	100%	0	0%
<i>Immunitics</i>	19	19	100%		0%		0%	19	100%	19	100%		0%		0%	19	100%	19	100%		0%
<i>Wampole /Zeus</i>	37	37	100%		0%		0%	37	100%	37	100%		0%		0%	37	100%	37	100%		0%
<i>Others</i> *	11	11	100%		0%		0%	10	91%	11	100%		0%		0%	11	100%	11	100%		0%
ELFA	31	31	100%	0	0%	1	3%	29	94%	31	100%	0	0%	0	0%	31	100%	31	100%	0	0%
<i>bioMérieux</i> *	31	31	100%		0%	1	3%	29	94%	31	100%		0%		0%	31	100%	31	100%		0%
Other Methods *	8	8	100%		0%	6	75%	1	13%	8	100%		0%		0%	8	100%	8	100%		0%
Analyte Total	106	106	100%	0	0%	7	7%	96	91%	106	100%	0	0%	0	0%	106	100%	106	100%	0	0%

* One laboratory reported a result of equivocal on sample #42

Note: The expected result for sample #42 is positive. Laboratories who reported any other result than positive for this sample should critically examine their protocol and test kit/method.

Lyme Western Blot IgG

		Participant Results/ Sample Number																													
		R = Reactive/ Positive; N = Non-Reactive/ Negative; E = Equivocal/ Indeterminate																													
Method	No. Labs	41 N						42 R						43 N						44 R						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%	0	0%	0	0%	27	100%	27	100%	0	0%	0	0%	0	0%	0	0%	27	100%	27	100%	0	0%	0	0%
<i>MarDx</i>	25	25	100%		0%		0%		0%		0%	25	100%	25	100%		0%		0%		0%		0%	25	100%	25	100%		0%		0%
<i>Other</i>	2	2	100%		0%		0%		0%		0%	2	100%	2	100%		0%		0%		0%		0%	2	100%	2	100%		0%		0%
Other Methods	3	3	100%		0%		0%		0%		0%	3	100%	3	100%		0%		0%		0%		0%	3	100%	3	100%		0%		0%
Analyte Total	30	30	100%	0	0%	0	0%	0	0%	0	0%	30	100%	30	100%	0	0%	0	0%	0	0%	0	0%	30	100%	30	100%	0	0%	0	0%

Lyme Western Blot IgM

		Participant Results/ Sample Number																													
		R = Reactive/ Positive; N = Non-Reactive/ Negative; E = Equivocal/ Indeterminate																													
Method	No. Labs	41 N						42 R						43 N						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%	4	15%	0	0%	23	85%	27	100%	0	0%	0	0%	23	85%	2	7%	2	7%	27	100%	0	0%	0	0%
<i>MarDx</i>	25	25	100%		0%		0%	2	8%		0%	23	92%	25	100%		0%		0%	21	84%	2	8%	2	8%	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	2	2	100%		0%		0%	1	50%		0%	1	50%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%
Analyte Total	29	29	100%	0	0%	0	0%	5	17%	0	0%	24	83%	29	100%	0	0%	0	0%	25	86%	2	7%	2	7%	29	100%	0	0%	0	0%

Rheumatoid Factor

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	26 N				27 N				28 N				29 N				30 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	9	9	100%	0	0%	9	100%	0	0%	9	100%	0	0%	9	100%	0	0%	0	0%	9	100%
<i>Others</i>	9	9	100%		0%	9	100%		0%	9	100%		0%	9	100%		0%		0%	9	100%
Latex Agglutination	123	123	100%	0	0%	123	100%	0	0%	123	100%	0	0%	123	100%	0	0%	1	1%	122	99%
<i>Becton Dickinson</i>	19	19	100%		0%	19	100%		0%	19	100%		0%	19	100%		0%		0%	19	100%
<i>Fisher</i>	46	46	100%		0%	46	100%		0%	46	100%		0%	46	100%		0%		0%	46	100%
<i>Seradyn</i>	10	10	100%		0%	10	100%		0%	10	100%		0%	10	100%		0%		0%	10	100%
<i>Wampole/Zeus</i>	12	12	100%		0%	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%
<i>Others</i>	36	36	100%		0%	36	100%		0%	36	100%		0%	36	100%		0%	1	3%	35	97%
Nephelometry	42	42	100%	0	0%	42	100%	0	0%	42	100%	0	0%	42	100%	0	0%	1	2%	41	98%
<i>Beckman Coulter</i>	17	17	100%		0%	17	100%		0%	17	100%		0%	17	100%		0%		0%	17	100%
<i>Behring</i>	25	25	100%		0%	25	100%		0%	25	100%		0%	25	100%		0%	1	4%	24	96%
Turbidimetry	45	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%	0	0%	45	100%
<i>Beckman Coulter</i>	16	16	100%		0%	16	100%		0%	16	100%		0%	16	100%		0%		0%	16	100%
<i>Roche</i>	24	24	100%		0%	24	100%		0%	24	100%		0%	24	100%		0%		0%	24	100%
<i>Others</i>	5	5	100%		0%	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%
Other Methods	4	4	100%	0	0%	4	100%	0	0%	4	100%	0	0%	4	100%	0	0%	0	0%	4	100%
Analyte Total	223	223	100%	0	0%	223	100%	0	0%	223	100%	0	0%	223	100%	0	0%	2	1%	221	99%

Rheumatoid Factor Latex Agglutination Procedure

The number of laboratories that reported titers is listed for positive test sample 30. 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>	No. Labs	A B	Sample 30 Titer					
			80 8	160 16	320 32	640 64	1280 128	2560 256
<i>Total</i>	86	A B	4	11 4	19 6	11 13	2 3	1
<i>Fisher</i>	34	A B			12 2	5 9	1	
<i>Becton Dickenson</i>	15	A B	1	8	4	1	1	

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

Results are summarized for positive test sample 30. 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 30
Nephelometry			
<i>Beckman Coulter IMMAGE</i>	14	IU/ml	676 \pm 59
<i>Dade Behring BN Pros.</i>	10	IU/ml	468 \pm 78
<i>Dade Behring Nephelometer</i>	12	IU/ml	475 \pm 60
Turbidimetry			
<i>Beckman Coulter Synchron</i>	11	IU/ml	1096 \pm 348
<i>Roche Diag. Cobas</i>	13	IU/ml	377 \pm 16

Rubella IgG Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	11 R				12 N				13 R				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	71	0	0%	71	100%	71	100%	0	0%	0	0%	71	100%	71	100%	0	0%	71	100%	0	0%
<i>Bayer</i>	29		0%	29	100%	29	100%		0%		0%	29	100%	29	100%		0%	29	100%		0%
<i>Beckman</i>	16		0%	16	100%	16	100%		0%		0%	16	100%	16	100%		0%	16	100%		0%
<i>Diagnostic Products</i>	26		0%	26	100%	26	100%		0%		0%	26	100%	26	100%		0%	26	100%		0%
EIA	58	0	0%	58	100%	58	100%	0	0%	0	0%	58	100%	58	100%	0	0%	58	100%	0	0%
<i>Abbott</i>	23		0%	23	100%	23	100%		0%		0%	23	100%	23	100%		0%	23	100%		0%
<i>Diamedix</i>	12		0%	12	100%	12	100%		0%		0%	12	100%	12	100%		0%	12	100%		0%
<i>Wampole/Zeus</i>	14		0%	14	100%	14	100%		0%		0%	14	100%	14	100%		0%	14	100%		0%
<i>Others</i>	9		0%	9	100%	9	100%		0%		0%	9	100%	9	100%		0%	9	100%		0%
ELFA	34	0	0%	34	100%	34	100%	0	0%	0	0%	34	100%	33	97%	1	3%	34	100%	0	0%
<i>bioMérieux Vidas</i>	34		0%	34	100%	34	100%		0%		0%	34	100%	33	97%	1	3%	34	100%		0%
Latex Agglutination	37	0	0%	37	100%	37	100%	0	0%	0	0%	37	100%	36	97%	1	3%	37	100%	0	0%
<i>Fisher</i>	20		0%	20	100%	20	100%		0%		0%	20	100%	20	100%		0%	20	100%		0%
<i>Others</i>	17		0%	17	100%	17	100%		0%		0%	17	100%	16	94%	1	6%	17	100%		0%
Other Methods	6		0%	6	100%	6	100%		0%		0%	6	100%	6	100%		0%	6	100%		0%
Analyte Total	206	0	0%	206	100%	206	100%	0	0%	0	0%	206	100%	204	99%	2	1%	206	100%	0	0%

Rubella IgG Antibody

Results are summarized for positive test samples 11 and 13. The Mean values \pm S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

Method	No.	Unit	Sample 11	Sample 13
<i>Manufacturer</i>	<i>Labs</i>			
Chemiluminescence				
<i>Bayer</i>	22	IU/ml	485 \pm 69	57 \pm 6.5
<i>Diagnostic Products</i>	22	IU/ml	105 \pm 13	21 \pm 2.6

Rubella IgM Specific

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method <i>Manufacturer</i>	No. Labs	56 N				57 R				58 N				59 N				60 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	10	10	100%		0%		0%	10	100%	10	100%		0%	10	100%		0%	10	100%		0%
Chemiluminescence	11	11	100%		0%		0%	11	100%	11	100%		0%	11	100%		0%	11	100%		0%
Analyte Total	21	21	100%	0	0%	0	0%	21	100%	21	100%	0	0%	21	100%	0	0%	21	100%	0	0%

Syphilis - Reagin Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	1 N				2 N				3 N				4 R				5 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
RPR	275	274	100%	1	0%	274	100%	1	0%	273	99%	2	1%	2	1%	273	99%	2	1%	273	99%
<i>ASI</i>	39	39	100%		0%	39	100%		0%	39	100%		0%	1	3%	38	97%		0%	39	100%
<i>Becton Dickenson</i>	136	135	99%	1	1%	135	99%	1	1%	135	99%	1	1%	1	1%	135	99%	1	1%	135	99%
<i>Fisher</i>	49	49	100%		0%	49	100%		0%	48	98%	1	2%		0%	49	100%		0%	49	100%
<i>True Medix</i>	17	17	100%		0%	17	100%		0%	17	100%		0%		0%	17	100%	1	6%	16	94%
<i>Wampole/Zeus</i>	21	21	100%		0%	21	100%		0%	21	100%		0%		0%	21	100%		0%	21	100%
<i>Others</i>	13	13	100%		0%	13	100%		0%	13	100%		0%		0%	13	100%		0%	13	100%
Other Methods	1	1	100%		0%	1	100%		0%	1	100%		0%		0%	1	100%		0%	1	100%
Analyte Total	276	275	100%	1	0%	275	100%	1	0%	274	99%	2	1%	2	1%	274	99%	2	1%	274	99%

Syphilis - Reagin Antibody

RPR Procedures

The number of laboratories that reported titers is listed for positive test samples 4 and 5 for the RPR procedure. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method <i>Manufacturer</i>	No. Labs	Sample 4 Titer						Sample 5 Titer					
		1	2	4	8	16	32	1	2	4	8	16	32
Total	244	15	136	86	5			19	185	35	3		
<i>ASI</i>	26	2	16	7	1			4	17	5			
<i>Becton Dickenson</i>	123	2	67	51	2			3	98	20	1		
<i>Fisher</i>	48	6	30	10	2			6	37	5			
<i>True Medix</i>	17	5	7	5				3	12		1		
<i>Wampole/ Zeus</i>	20		11	8				2	16	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.

Syphilis - Treponemal Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	1 N				2 N				3 N				4 R				5 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	15	10	67%	4	27%	8	53%	5	33%	9	60%	4	27%	0	0%	15	100%	0	0%	15	100%
<i>Trinity Biotech</i> ¹	10	5	50%	4	40%	3	30%	5	50%	4	40%	4	40%		0%	10	100%		0%	10	100%
<i>Others</i>	5	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%		0%	5	100%
Gel. Part. Agglut.	33	32	97%	1	3%	32	97%	1	3%	32	97%	1	3%	1	3%	32	97%	1	3%	32	97%
<i>Fujirebio</i>	33	32	97%	1	3%	32	97%	1	3%	32	97%	1	3%	1	3%	32	97%	1	3%	32	97%
IFA	25	25	100%	0	0%	25	100%	0	0%	25	100%	0	0%	0	0%	25	100%	0	0%	25	100%
<i>Wampole/Zeus</i>	25	25	100%		0%	25	100%		0%	25	100%		0%		0%	25	100%		0%	25	100%
Other Methods	14	14	100%		0%	14	100%		0%	14	100%		0%		0%	14	100%	1	7%	13	93%
Analyte Total	87	81	93%	5	6%	79	91%	6	7%	80	92%	5	6%	1	1%	86	99%	2	2%	85	98%

1 One equivocal result reported on sample #1, two equivocal results reported on each of sample #2 and sample #3.

Note: The expected result for sample #1, #2 and #3 is negative. Laboratories who reported any other result than negative for this sample should critically examine their protocol and test kit/method.

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	No.	Sample NO.				
		Labs	76	77	78	79
Alpha-1-Antitrypsin						
Nephelometry/ <i>Behring Nephelometer</i>	20	207 \pm 13	12 \pm 0.8	212 \pm 9.1	253 \pm 12	8.7 \pm 0.5
Nephelometry/ <i>Total</i>	30	186 \pm 32	12 \pm 0.8	208 \pm 11	228 \pm 39	8.7 \pm 0.5
Turbidimetry/ <i>Total</i>	6	165 \pm 12	< 36	184 \pm 8.4	193 \pm 5.8	< 36
Complement C'3						
Nephelometry/ <i>Beckman Coulter IMMAGE</i>	18	330 \pm 13	36 \pm 0.9	152 \pm 4.5	234 \pm 12	38 \pm 1.7
Nephelometry/ <i>Behring Nephelometer</i>	17	372 \pm 27	36 \pm 2.4	161 \pm 8.3	241 \pm 14	37 \pm 2.3
Turbidimetry/ <i>Roche Cobas Integra</i>	12	374 \pm 11	35 \pm 1.2	160 \pm 3.7	236 \pm 6.6	37 \pm 1.2
Nephelometry/ <i>Total</i>	50	352 \pm 28	36 \pm 1.8	156 \pm 8.1	236 \pm 12	38 \pm 1.8
Turbidimetry/ <i>Total</i>	47	371 \pm 20	36 \pm 3.5	155 \pm 7.2	238 \pm 11	38 \pm 3.4
Complement C'4						
Nephelometry/ <i>Beckman Coulter IMMAGE</i>	18	41 \pm 1.6	4.0 \pm 0.1	38 \pm 1.4	120 \pm 6.9	4.2 \pm 0.3
Nephelometry/ <i>Behring Nephelometer</i>	17	37 \pm 1.7	3.9 \pm 0.1	35 \pm 1.6	113 \pm 9.2	4.0 \pm 0.2
Turbidimetry/ <i>Roche Cobas Integra</i>	11	38 \pm 1.8	< 6	35 \pm 1.3	110 \pm 4.8	< 6
Nephelometry/ <i>Total</i>	50	38 \pm 2.5	3.9 \pm 0.1	36 \pm 2.0	113 \pm 9.8	4.1 \pm 0.2
Turbidimetry/ <i>Total</i>	45	37 \pm 3.1	< 10	33 \pm 2.7	104 \pm 10	< 10

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
Immunoglobulin A (mg/dl)						
Nephelometry/Beckman Coulter IMMAGE	20	611 \pm 27	46 \pm 1.5	515 \pm 21	112 \pm 3.5	307 \pm 11
Nephelometry/Behring Nephelometer	20	636 \pm 37	50 \pm 3.6	532 \pm 31	111 \pm 3.2	304 \pm 13
Nephelometry/Behring BN Prospec	11	664 \pm 73	48 \pm 1.1	499 \pm 26	111 \pm 6.6	288 \pm 12
Turbidimetry/ Beckman Coulter Synchron	11	579 \pm 18	52 \pm 5.0	446 \pm 17	118 \pm 5.6	294 \pm 9.0
Turbidimetry/ Roche Cobas Integra	13	530 \pm 10	47 \pm 5.1	492 \pm 11	96 \pm 3.1	290 \pm 6.0
Nephelometry/ Total	61	622 \pm 57	48 \pm 2.7	516 \pm 31	112 \pm 5.1	303 \pm 14
Turbidimetry/ Total	55	534 \pm 55	49 \pm 4.3	470 \pm 32	104 \pm 10	288 \pm 12
Immunoglobulin E (IU/ml)						
Chemiluminescence/Bayer Advia Cent.	10	445 \pm 14	28 \pm 1.8	602 \pm 35	745 \pm 46	5.2 \pm 1.8
Chemiluminescence/Diag. Prod. Co.	34	394 \pm 34	28 \pm 2.4	547 \pm 50	695 \pm 64	7.9 \pm 0.6
Chemiluminescence/ Total	50	407 \pm 35	27 \pm 2.3	560 \pm 49	702 \pm 62	7.8 \pm 0.8
FEIA/ Total	15	436 \pm 29	28 \pm 2.1	546 \pm 38	664 \pm 27	11 \pm 0.7
Nephelometry/ Total	11	388 \pm 44	27 \pm 2.5	560 \pm 42	675 \pm 47	14 \pm 9.1
Immunoglobulin G (mg/dl)						
Nephelometry/Beckman Coulter IMMAGE	19	2326 \pm 88	252 \pm 15	1274 \pm 32	650 \pm 30	1108 \pm 47
Nephelometry/Behring Nephelometer	21	2932 \pm 93	266 \pm 13	1440 \pm 52	709 \pm 22	1174 \pm 47
Nephelometry/Behring BN Prospec	11	2905 \pm 114	257 \pm 12	1376 \pm 50	698 \pm 12	1146 \pm 41
Turbidimetry/Beckman Coulter Synchron	10	2530 \pm 53	240 \pm 7.4	1291 \pm 41	636 \pm 20	1078 \pm 20
Turbidimetry/Roche Cobas Integra	13	2447 \pm 63	240 \pm 10	1270 \pm 30	627 \pm 8.9	1061 \pm 25
Nephelometry/ Total	61	2651 \pm 329	257 \pm 15	1356 \pm 89	678 \pm 38	1138 \pm 57
Turbidimetry/ Total	52	2395 \pm 219	245 \pm 19	1255 \pm 51	628 \pm 14	1066 \pm 49
Immunoglobulin M (mg/dl)						
Nephelometry/Beckman Coulter IMMAGE	19	205 \pm 9.4	25 \pm 1.6	193 \pm 8.1	131 \pm 5.9	112 \pm 4.3
Nephelometry/Behring Nephelometer	20	347 \pm 21	26 \pm 1.5	260 \pm 13	132 \pm 6.8	109 \pm 6.3
Nephelometry/Behring BN Prospec	11	314 \pm 9.4	24 \pm 1.4	239 \pm 8.4	126 \pm 4.4	108 \pm 4.0
Turbidimetry/Roche Cobas Integra	13	177 \pm 4.3	22 \pm 2.4	209 \pm 4.7	138 \pm 3.7	114 \pm 3.3
Nephelometry/ Total	60	279 \pm 65	25 \pm 1.6	229 \pm 33	131 \pm 6.8	111 \pm 5.9
Turbidimetry/ Total	51	193 \pm 24	26 \pm 3.4	200 \pm 11	129 \pm 9.5	111 \pm 7.3

Acceptable Response (May 9, 2007 PT Event)
Quantitative Tests Results (Acceptable Range)

Analytes	Sample NO.				
Method/ Manufacture					
Alpha-1-Antitrypsin	76	77	78	79	80
Nephelometry/Dade Behring Neph.	168 - 246	9 - 15	184 - 240	217 - 290	7 - 11
Nephelometry/ Total	90 - 283	9 - 15	174 - 241	111 - 344	7 - 11
Turbidimetry/ Total	128 - 203	< 36	159 - 210	175 - 211	< 36
Complement C'3	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	291 - 368	32 - 39	138 - 166	199 - 269	32 - 43
Nephelometry/Dade Behring Neph.	290 - 453	29 - 44	136 - 186	199 - 282	30 - 45
Turbidimetry/Roche Cobas Integra	340 - 409	31 - 39	148 - 171	216 - 257	33 - 41
Nephelometry/ Total	268 - 438	30 - 42	132 - 181	199 - 274	32 - 43
Turbidimetry/ Total	311 - 430	25 - 47	133 - 177	204 - 271	27 - 49
Complement C'4	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	36 - 46	3 - 5	33 - 42	99 - 141	3 - 6
Nephelometry/Dade Behring Neph.	31 - 42	3 - 5	30 - 41	85 - 141	3 - 5
Turbidimetry/Roche Cobas Integra	33 - 44	3 - 5	30 - 39	95 - 123	3 - 5
Nephelometry/ Total	30 - 46	3 - 5	29 - 42	83 - 143	3 - 5
Turbidimetry/ Total	27 - 46	3 - 5	24 - 42	73 - 136	3 - 5
Immunoglobulin A	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	529 - 694	41 - 51	452 - 578	101 - 123	273 - 342
Nephelometry/Dade Behring Neph .	523 - 749	39 - 62	437 - 627	101 - 121	265 - 343
Nephelometry/Dade Behring BN P.	445 - 883	44 - 52	420 - 578	91 - 131	252 - 323
Turbidimetry/ Beckman Coulter Synch.	524 - 633	47 - 54	395 - 498	101 - 135	266 - 321
Turbidimetry/ Roche Cobas Integra	499 - 562	31 - 63	457 - 526	86 - 105	271 - 308
Nephelometry/ Total	449 - 794	40 - 57	423 - 609	96 - 127	259 - 347
Turbidimetry/ Total	369 - 699	35 - 62	375 - 565	73 - 135	250 - 325
Immunoglobulin E	81	82	83	84	85
Chemiluminescence/Bayer Advia Centaur	404 - 486	22 - 33	497 - 706	606 - 882	1 - 11
Chemiluminescence/Diag.Prod. Immulite	293 - 494	20 - 35	398 - 697	502 - 888	5 - 10
Chemiluminescence/ Total	301 - 513	20 - 35	412 - 708	517 - 887	5 - 10
FEIA/ Total	349 - 523	22 - 35	433 - 659	583 - 745	8 - 13
Nephelometry/ Total	255 - 521	19 - 35	432 - 688	535 - 816	< 35
Immunoglobulin G	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	1744 - 2908	189 - 316	955 - 1593	487 - 813	830 - 1385
Nephelometry/Dade Behring Neph .	2198 - 3665	199 - 333	1079 - 1800	532 - 887	880 - 1468
Nephelometry/Dade Behring BN P.	2178 - 3631	192 - 321	1031 - 1720	523 - 873	859 - 1433
Turbidimetry/Beckman Coulter Synchron	1897 - 3163	180 - 301	968 - 1615	476 - 795	808 - 1348
Turbidimetry/Roche Cobas Integra	1835 - 3059	179 - 300	952 - 1588	470 - 785	795 - 1327
Nephelometry/ Total	1988 - 3314	193 - 322	1016 - 1695	508 - 848	853 - 1422
Turbidimetry/ Total	1796 - 2994	184 - 307	941 - 1569	471 - 786	799 - 1332
Immunoglobulin M	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	177 - 234	19 - 30	168 - 218	112 - 149	98 - 125
Nephelometry/Dade Behring Neph .	283 - 412	21 - 31	221 - 299	111 - 153	90 - 129
Nephelometry/Dade Behring BN P.	286 - 343	19 - 29	213 - 265	112 - 140	95 - 120
Turbidimetry/Roche Cobas Integra	164 - 191	15 - 30	194 - 223	126 - 149	103 - 124
Nephelometry/ Total	83 - 475	20 - 30	130 - 328	110 - 152	93 - 129
Turbidimetry/ Total	121 - 265	15 - 37	165 - 234	100 - 158	88 - 133

**Acceptable Response (May 9, 2007 PT Event)
Qualitative / Quantitative Tests Results**

Analytes	Sample NO.				
	1	2	3	4	5
Syphilis - Reagin Ab	N	N	N	R	R
<i>RPR Titer</i>				1 - 8	1 - 4
Syphilis - Treponemal	N	N	N	R	R
	6	7	8	9	10
HBcAb	N	N	N	R	N
HBsAg	N	N	N	R	N
	11	12	13	14	15
CMV	R	N	R	N	N
Rubella Ab	R	N	R	N	N
	16	17	18	19	20
ASO	N	R	N	N	N
<i>Latex Agglutination as IU/ml</i>		100 - 1600			
	26	27	28	29	30
Infectious Mono.	N	N	N	N	R
Rheumatoid Factor	N	N	N	N	R
<i>Latex Agglutination Titer</i>					16 - 256
<i>Latex Agglutination as IU/ml</i>					80 - 2560
	31	32	33	34	35
HIV Ab Screening/Confirmation	R	N	R	N	N
	36	37	38	39	40
HTLV 1 Ab	N	N	R	N	N
	41	42	43	44	45
LYME Disease Ab	N	R	N	R	N
LYME Disease Ab WB IgG	N	R	N	R	N
LYME Disease Ab WB IgM	N	R	N	N	N
	46	47	48	49	50
ANA	R	N	N	N	N
<i>IFA Titer</i>	40 - 1280				
	56	57	58	59	60
Rubella IgM	N	R	N	N	N
	61	62	63	64	65
HIV p24 Ag	N	N	N	N	R
	66	67	68	69	70
HBeAg	N	N	R	R	N
	71	72	73	74	75
Hepatitis C Ab	N	N	R	N	R

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