

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

Proficiency Testing Program

13-Sep-06

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

**Proficiency Test Event
13-Sep-06**

**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 September 13, 2006 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 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 positive or negative
Rubella Ab, IgM	Target value \pm 2 dilutions 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 N				47 R				48 R				49 N				50 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	51	51	100%	0	0%	0	0%	51	100%	0	0%	51	100%	51	100%	0	0%	51	100%	0	0%
<i>Bio-Rad</i>	11	11	100%		0%		0%	11	100%		0%	11	100%	11	100%		0%	11	100%		0%
<i>Diamedix</i>	10	10	100%		0%		0%	10	100%		0%	10	100%	10	100%		0%	10	100%		0%
<i>Others</i>	30	30	100%		0%		0%	30	100%		0%	30	100%	30	100%		0%	30	100%		0%
IFA	77	77	100%	0	0%	0	0%	77	100%	0	0%	77	100%	77	100%	0	0%	77	100%	0	0%
<i>Bio-Rad</i>	22	22	100%		0%		0%	22	100%		0%	22	100%	22	100%		0%	22	100%		0%
<i>The Binding Site</i>	12	12	100%		0%		0%	12	100%		0%	12	100%	12	100%		0%	12	100%		0%
<i>Wampole/Zeus</i>	22	22	100%		0%		0%	22	100%		0%	22	100%	22	100%		0%	22	100%		0%
<i>Others</i>	21	21	100%		0%		0%	21	100%		0%	21	100%	21	100%		0%	21	100%		0%
Other Methods [1]	13	12	92%		0%	4	31%	8	62%		0%	13	100%	13	100%		0%	13	100%		0%
Analyte Total	141	140	99%	0	0%	4	3%	136	96%	0	0%	141	100%	141	100%	0	0%	141	100%	0	0%

[1] One laboratory reported an equivocal/indeterminate result on sample #46 and one laboratory reported an equivocal/indeterminate result on sample #47.

Note: Of the 95 laboratories reporting staining patterns: 95% found test sample 47 to stain Homogenous, and 95% found test sample 48 to stain Homogenous.

Antinuclear Antibody

The number of laboratories that reported titers is listed for positive test samples 47 and 48. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method	No. Labs	Sample 47							Sample 48							
		40	80	160	320	640	1280	2560	80	160	320	640	1280	2560	5120	10240
IFA																
<i>Bio-Rad</i>	22		4	7	9	1			3	7	5	6				
<i>Wampole/ Zeus</i>	20	2	2	10	3	3			4	9	3	3	1			
<i>The Binding site</i>	12			3	5	3	1			2	9		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

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	16 R				17 N				18 N				19 N				20 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Latex Agglutination	84	1	1%	83	99%	84	100%	0	0%	84	100%	0	0%	84	100%	0	0%	2	2%	82	98%
<i>Behring</i>	21		0%	21	100%	21	100%		0%	21	100%		0%	21	100%		0%		0%	21	100%
<i>Fisher</i>	26		0%	26	100%	26	100%		0%	26	100%		0%	26	100%		0%	1	4%	25	96%
<i>Remel</i>	14		0%	14	100%	14	100%		0%	14	100%		0%	14	100%		0%		0%	14	100%
<i>Others</i>	23	1	4%	22	96%	23	100%		0%	23	100%		0%	23	100%		0%	1	4%	22	96%
Nephelometry	28	0	0%	28	100%	28	100%	0	0%	28	100%	0	0%	28	100%	0	0%	0	0%	28	100%
<i>Beckman</i>	16		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%		0%	16	100%
<i>Behring</i>	12		0%	12	100%	12	100%		0%	12	100%		0%	12	100%		0%		0%	12	100%
Turbidimetry	19	0	0%	19	100%	19	100%	0	0%	19	100%	0	0%	19	100%	0	0%	0	0%	19	100%
<i>Roche Diagnostics</i>	14		0%	14	100%	14	100%		0%	14	100%		0%	14	100%		0%		0%	14	100%
<i>Others</i>	5		0%	5	100%	5	100%		0%	5	100%		0%	5	100%		0%		0%	5	100%
Other Methods	12		0%	12	100%	12	100%		0%	12	100%		0%	11	92%	1	8%	1	8%	11	92%
Analyte Total	143	1	1%	142	99%	143	100%	0	0%	143	100%	0	0%	142	99%	1	1%	3	2%	140	98%

Antistreptolysin O Latex Agglutination Procedures

The number of laboratories that reported titers is listed for positive test samples 16 and 20. Only testing systems with 10 or more laboratories reporting titers are listed in this table.

Method <i>Manufacturer</i>	No. Labs	Sample 16 Titers					Sample 20 Titers				
		100	200	400	800	1600	400	800	1600	3200	6400
<i>Biokit/ Fisher</i>	16			12	4		9	7			
<i>Dade Behring</i> ^[1]	16			8	6		7	7			
<i>Remel</i>	12			11		1	9	2			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 samples 16 and 20. The Mean values \pm S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

Method	Manufacturer	No. Labs	IU/ml	
			Sample 16	Sample 20
Nephelometry				
	<i>Dade Behring Neph.</i>	13	770 \pm 78	808 \pm 76
	<i>Beckman Coulter Immage</i>	10	529 \pm 23	535 \pm 27
Turbidimetry				
	<i>Roche Diagnostics Cobas</i>	10	758 \pm 32	772 \pm 30

Cytomegalovirus Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	11 N				12 R				13 R				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	38	38	100%	0	0%	1	3%	37	97%	0	0%	38	100%	38	100%	0	0%	38	100%	0	0%
<i>Wampole /Zeus</i>	18	18	100%		0%	1	6%	17	94%		0%	18	100%	18	100%		0%	18	100%		0%
<i>Others</i>	20	20	100%		0%		0%	20	100%		0%	20	100%	20	100%		0%	20	100%		0%
ELFA	22	22	100%	0	0%	0	0%	22	100%	0	0%	22	100%	22	100%	0	0%	22	100%	0	0%
<i>bioMérieux Vidas</i>	22	22	100%		0%		0%	22	100%		0%	22	100%	22	100%		0%	22	100%		0%
Chemiluminescence	16	16	100%	0	0%	0	0%	16	100%	0	0%	16	100%	16	100%	0	0%	16	100%	0	0%
<i>Diagnostic Products</i>	16	16	100%		0%		0%	16	100%		0%	16	100%	16	100%		0%	16	100%		0%
Hemagglutination	11	11	100%	0	0%	0	0%	11	100%	0	0%	11	100%	11	100%	0	0%	11	100%	0	0%
<i>Olympus</i>	11	11	100%		0%		0%	11	100%		0%	11	100%	11	100%		0%	11	100%		0%
Other Methods	9	9	100%		0%	1	11%	8	89%		0%	9	100%	9	100%		0%	9	100%		0%
Analyte Total	96	96	100%	0	0%	2	2%	94	98%	0	0%	96	100%	96	100%	0	0%	96	100%	0	0%

Cytomegalovirus Antibody

Results are summarized for positive test samples 12 and 13. For the procedure indicated, the Mean values \pm S.D. are given where 10 or more laboratories reported quantitative results.

<i>Manufacturer</i>	No. Labs	Units	Sample Number 12	Sample Number 13
Chemiluminescence				
<i>DPC Immulite</i>	11	Ratio	3.65 ± 0.18	4.27 ± 0.23
EIA				
<i>Wampole/ Zeus Scientific</i>	12	Ratio	1.71 ± 0.15	2.10 ± 0.21
ELFA				
<i>bioMerieux Vidas</i>	14	AU/ml	25 ± 1.98	32 ± 3.09

Hepatitis B Core Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	6 N				7 N				8 R				9 N				10 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	76	76	100%	0	0%	76	100%	0	0%	0	0%	76	100%	75	99%	1	1%	0	0%	76	100%
<i>Bayer</i>	22	22	100%		0%	22	100%		0%		0%	22	100%	21	95%	1	5%		0%	22	100%
<i>Diagnostic Products</i>	24	24	100%		0%	24	100%		0%		0%	24	100%	24	100%		0%		0%	24	100%
<i>Ortho</i>	27	27	100%		0%	27	100%		0%		0%	27	100%	27	100%		0%		0%	27	100%
<i>Other</i>	3	3	100%		0%	3	100%		0%		0%	3	100%	3	100%		0%		0%	3	100%
EIA	78	78	100%	0	0%	78	100%	0	0%	0	0%	78	100%	78	100%	0	0%	0	0%	78	100%
<i>Abbott</i>	57	57	100%		0%	57	100%		0%		0%	57	100%	57	100%		0%		0%	57	100%
<i>Ortho</i>	11	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%		0%	11	100%
<i>Other</i>	10	10	100%		0%	10	100%		0%		0%	10	100%	10	100%		0%		0%	10	100%
Other Methods	1	1	100%		0%	1	100%		0%		0%	1	100%	1	100%		0%		0%	1	100%
Analyte Total	155	155	100%	0	0%	155	100%	0	0%	0	0%	155	100%	154	99%	1	1%	0	0%	155	100%

Hepatitis B Surface Antigen

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	6 N				7 N				8 R				9 N				10 R			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	91	91	100%	0	0%	91	100%	0	0%	0	0%	91	100%	90	99%	1	1%	2	2%	89	98%
<i>Bayer</i>	27	27	100%		0%	27	100%		0%		0%	27	100%	26	96%	1	4%	1	4%	26	96%
<i>Diagnostic Products</i>	27	27	100%		0%	27	100%		0%		0%	27	100%	27	100%		0%		0%	27	100%
<i>Ortho</i>	35	35	100%		0%	35	100%		0%		0%	35	100%	35	100%		0%	1	3%	34	97%
<i>Other</i>	2	2	100%		0%	2	100%		0%		0%	2	100%	2	100%		0%		0%	2	100%
EIA	105	105	100%	0	0%	105	100%	0	0%	0	0%	105	100%	105	100%	0	0%	0	0%	105	100%
<i>Abbott</i>	73	73	100%		0%	73	100%		0%		0%	73	100%	73	100%		0%		0%	73	100%
<i>Roche</i>	11	11	100%		0%	11	100%		0%		0%	11	100%	11	100%		0%		0%	11	100%
<i>Other</i>	21	21	100%		0%	21	100%		0%		0%	21	100%	21	100%		0%		0%	21	100%
Other Methods	4	4	100%		0%	4	100%		0%		0%	4	100%	4	100%		0%		0%	4	100%
Analyte Total	200	200	100%	0	0%	200	100%	0	0%	0	0%	200	100%	199	100%	1	1%	2	1%	198	99%

Hepatitis Be Antigen

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	66 R				67 N				68 R				69 N				70 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	32	0	0%	32	100%	32	100%	0	0%	0	0%	32	100%	32	100%	0	0%	32	100%	0	0%
<i>DiaSorin</i>	31		0%	31	100%	31	100%		0%		0%	31	100%	31	100%		0%	31	100%		0%
<i>Other</i>	1		0%	1	100%	1	100%		0%		0%	1	100%	1	100%		0%	1	100%		0%
Other Methods	2		0%	2	100%	2	100%		0%		0%	2	100%	2	100%		0%	2	100%		0%
Analyte Total	34	0	0%	34	100%	34	100%	0	0%	0	0%	34	100%	34	100%	0	0%	34	100%	0	0%

Hepatitis C Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	71 R				72 R				73 N				74 N				75 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	64	0	0%	63	98%	0	0%	64	100%	64	100%	0	0%	64	100%	0	0%	64	100%	0	0%
<i>Bayer</i>	29		0%	29	100%		0%	29	100%	29	100%		0%	29	100%		0%	29	100%		0%
<i>Ortho [1]</i>	35		0%	34	97%		0%	35	100%	35	100%		0%	35	100%		0%	35	100%		0%
EIA	85	1	1%	82	96%	0	0%	85	100%	85	100%	0	0%	85	100%	0	0%	85	100%	0	0%
<i>Abbott</i>	59	1	2%	58	98%		0%	59	100%	59	100%		0%	59	100%		0%	59	100%		0%
<i>Ortho [2]</i>	26		0%	24	92%		0%	26	100%	26	100%		0%	26	100%		0%	26	100%		0%
MEIA	16	0	0%	16	100%	0	0%	16	100%	16	100%	0	0%	16	100%	0	0%	16	100%	0	0%
<i>Abbott</i>	16		0%	16	100%		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%
Analyte Total	165	1	1%	161	98%	0	0%	165	100%	165	100%	0	0%	165	100%	0	0%	165	100%	0	0%

[1] One laboratory using this Ortho system for screening, reported a final result of equivocal using the Chiron RIBA system to confirm.

[2] Two laboratories using this Ortho system for screening, reported a final result of equivocal using the Chiron RIBA system to confirm.

HIV Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	31 N				32 R				33 R				34 N				35 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	128	128	100%	0	0%	0	0%	128	100%	0	0%	128	100%	128	100%	0	0%	128	100%	0	0%
	<i>Abbott</i>	67	100%		0%		0%	67	100%		0%	67	100%	67	100%		0%	67	100%		0%
	<i>bioMérieux</i>	16	100%		0%		0%	16	100%		0%	16	100%	16	100%		0%	16	100%		0%
	<i>Bio-Rad</i>	45	100%		0%		0%	45	100%		0%	45	100%	45	100%		0%	45	100%		0%
Rapid EIA	99	99	100%	0	0%	1	1%	98	99%	0	0%	99	100%	98	99%	1	1%	99	100%	0	0%
	<i>Orasure</i>	99	100%		0%	1	1%	98	99%		0%	99	100%	98	99%	1	1%	99	100%		0%
Rapid Immunoassay	38	38	100%	0	0%	0	0%	37	97%	0	0%	38	100%	38	100%	0	0%	38	100%	0	0%
	<i>Medmira</i>	24	100%		0%		0%	24	100%		0%	24	100%	24	100%		0%	24	100%		0%
	<i>Trinity [1]</i>	11	100%		0%		0%	10	91%		0%	11	100%	11	100%		0%	11	100%		0%
	<i>Other</i>	3	100%		0%		0%	3	100%		0%	3	100%	3	100%		0%	3	100%		0%
Western Blot	42	42	100%	0	0%	0	0%	42	100%	0	0%	42	100%	42	100%	0	0%	42	100%	0	0%
	<i>Bio-Rad</i>	37	100%		0%		0%	37	100%		0%	37	100%	37	100%		0%	37	100%		0%
	<i>Other</i>	5	100%		0%		0%	5	100%		0%	5	100%	5	100%		0%	5	100%		0%
Other Methods	3	3	100%	0	0%	0	0%	3	100%	0	0%	3	100%	3	100%	0	0%	3	100%	0	0%
Analyte Total	310	310	100%	0	0%	1	0%	308	99%	0	0%	310	100%	309	100%	1	0%	310	100%	0	0%

[1] One laboratory reported an invalid result on reactive sample #32.

HIV p24 Antigen

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	61 N				62 N				63 R				64 N				65 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	3	3	100%	0	0%	3	100%	0	0%	0	0%	3	100%	3	100%	0	0%	3	100%	0	0%
	<i>Beckman Coulter</i>	3	100%		0%	3	100%		0%		0%	3	100%	3	100%		0%	3	100%		0%
Analyte Total	3	3	100%	0	0%	3	100%	0	0%	0	0%	3	100%	3	100%	0	0%	3	100%	0	0%

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	%
EIA	45	0	0%	45	100%	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%
<i>Abbott</i>	29		0%	29	100%	29	100%		0%	29	100%		0%	29	100%		0%	29	100%		0%
<i>bioMérieux</i>	16		0%	16	100%	16	100%		0%	16	100%		0%	16	100%		0%	16	100%		0%
Analyte Total	45	0	0%	45	100%	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%	45	100%	0	0%

Infectious Mononucleosis

Method <i>Manufacturer</i>		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
		26 N				27 N				28 R				29 R				30 N			
No. Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	
CICA	29	29	100%	0	0%	29	100%	0	0%	0	0%	27	93%	0	0%	29	100%	29	100%	0	0%
<i>Cardinal Health SP</i>	11	11	100%		0%	11	100%		0%		0%	11	100%		0%	11	100%	11	100%		0%
<i>Others [1]</i>	18	18	100%		0%	18	100%		0%		0%	16	89%		0%	18	100%	18	100%		0%
Hemagglutination	48	48	100%	0	0%	48	100%	0	0%	0	0%	48	100%	0	0%	48	100%	48	100%	0	0%
<i>Fisher</i>	15	15	100%		0%	15	100%		0%		0%	15	100%		0%	15	100%	15	100%		0%
<i>Wampole/Zeus</i>	25	25	100%		0%	25	100%		0%		0%	25	100%		0%	25	100%	25	100%		0%
<i>Others</i>	8	8	100%		0%	8	100%		0%		0%	8	100%		0%	8	100%	8	100%		0%
Latex Agglutination	152	152	100%	0	0%	151	99%	1	1%	0	0%	152	100%	0	0%	152	100%	152	100%	0	0%
<i>Fisher</i>	54	54	100%		0%	54	100%		0%		0%	54	100%		0%	54	100%	54	100%		0%
<i>Remel</i>	23	23	100%		0%	22	96%	1	4%		0%	23	100%		0%	23	100%	23	100%		0%
<i>Wampole/Zeus</i>	54	54	100%		0%	54	100%		0%		0%	54	100%		0%	54	100%	54	100%		0%
<i>Others</i>	21	21	100%		0%	21	100%		0%		0%	21	100%		0%	21	100%	21	100%		0%
Solid Phase IA	56	56	100%	0	0%	56	100%	0	0%	0	0%	56	100%	0	0%	56	100%	56	100%	0	0%
<i>Seradyn</i>	22	22	100%		0%	22	100%		0%		0%	22	100%		0%	22	100%	22	100%		0%
<i>Wampole/Zeus</i>	26	26	100%		0%	26	100%		0%		0%	26	100%		0%	26	100%	26	100%		0%
<i>Others</i>	8	8	100%		0%	8	100%		0%		0%	8	100%		0%	8	100%	8	100%		0%
Other Methods	2	2	100%		0%	2	100%		0%	1	50%	1	50%		0%	2	100%	2	100%		0%
Analyte Total	287	287	100%	0	0%	286	100%	1	0%	1	0%	284	99%	0	0%	287	100%	287	100%	0	0%

[1] Two laboratories reported an equivocal/indeterminate result for reactive sample #28.

Infectious Mononucleosis Latex Agglutination Procedures

The number of laboratories that reported titers are summarized for positive test samples 28 and 29. 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. A Labs B	Sample 28 Titers							Sample 29 Titers					
		2	4	8	16	32	64	128	2	4	8	16	32	64
Latex Agglutination	19			4	6	1	1			1		8	2	1
		3	2						1	3	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.

Lyme Disease Antibody

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	41 R				42 N				43 R				44 N				45 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	64	0	0%	64	100%	64	100%	0	0%	0	0%	64	100%	64	100%	0	0%	64	100%	0	0%
<i>Immunetics</i>	17		0%	17	100%	17	100%		0%		0%	17	100%	17	100%		0%	17	100%		0%
<i>Wampole /Zeus</i>	33		0%	33	100%	33	100%		0%		0%	33	100%	33	100%		0%	33	100%		0%
<i>Others</i>	14		0%	14	100%	14	100%		0%		0%	14	100%	14	100%		0%	14	100%		0%
ELFA	30	0	0%	30	100%	30	100%	0	0%	0	0%	30	100%	30	100%	0	0%	30	100%	0	0%
<i>bioMérieux</i>	30		0%	30	100%	30	100%		0%		0%	30	100%	30	100%		0%	30	100%		0%
Other Methods	8		0%	8	100%	8	100%		0%		0%	8	100%	8	100%		0%	8	100%		0%
Analyte Total	102	0	0%	102	100%	102	100%	0	0%	0	0%	102	100%	102	100%	0	0%	102	100%	0	0%

Lyme Western Blot IgG

		Participant Results/ Sample Number																																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative; E = Equivocal/ Indeterminate																																			
Method	No. Labs	41 R						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	28	0	0%	0	0%	28	100%	28	100%	0	0%	0	0%	0	0%	0	0%	28	100%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%
<i>MarDx</i>	26		0%		0%	26	100%	26	100%		0%		0%		0%		0%	26	100%	26	100%		0%		0%	26	100%		0%		0%	26	100%		0%		0%
<i>Other</i>	2		0%		0%	2	100%	2	100%		0%		0%		0%		0%	2	100%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%
Other Methods	3		0%		0%	3	100%	3	100%		0%		0%		0%		0%	3	100%	3	100%		0%		0%	3	100%		0%		0%	3	100%		0%		0%
Analyte Total	31	0	0%	0	0%	31	100%	31	100%	0	0%	0	0%	0	0%	0	0%	31	100%	31	100%	0	0%	0	0%	31	100%	0	0%	0	0%	31	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 R						42 N						43 N						44 N						45 N											
		N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%	N	%	E	%	R	%						
Western Blot - IgM	28	0	0%	0	0%	28	100%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%	28	100%	0	0%	0	0%
<i>MarDx</i>	26		0%		0%	26	100%	26	100%		0%		0%	26	100%		0%		0%	26	100%		0%		0%	26	100%		0%		0%	26	100%		0%		0%
<i>Other</i>	2		0%		0%	2	100%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%
Other Methods	2		0%		0%	2	100%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%	2	100%		0%		0%
Analyte Total	30	0	0%	0	0%	30	100%	30	100%	0	0%	0	0%	30	100%	0	0%	0	0%	30	100%	0	0%	0	0%	30	100%	0	0%	0	0%	30	100%	0	0%	0	0%

Rheumatoid Factor

Method <i>Manufacturer</i>		Participant Results/ Sample Number																					
		R = Reactive/ Positive; N = Non-Reactive/ Negative																					
		26 N				27 N				28 R				29 N				30 R					
No. Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%			
EIA	12	12	100%	0	0%	11	92%	1	8%	0	0%	12	100%	12	100%	0	0%	1	8%	11	92%		
<i>Others</i>	12	12	100%		0%	11	92%	1	8%		0%	12	100%	12	100%		0%	1	8%	11	92%		
Latex Agglutination	125	125	100%	0	0%	125	100%	0	0%	0	0%	125	100%	124	99%	1	1%	1	1%	124	99%		
<i>Becton Dickinson</i>	19	19	100%		0%	19	100%		0%		0%	19	100%	19	100%		0%		0%	19	100%		
<i>Fisher</i>	47	47	100%		0%	47	100%		0%		0%	47	100%	47	100%		0%		0%	47	100%		
<i>Seradyn</i>	13	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%	1	8%	12	92%		
<i>Wampole/Zeus</i>	13	13	100%		0%	13	100%		0%		0%	13	100%	12	92%	1	8%		0%	13	100%		
<i>Others</i>	33	33	100%		0%	33	100%		0%		0%	33	100%	33	100%		0%		0%	33	100%		
Nephelometry	43	43	100%	0	0%	43	100%	0	0%	0	0%	43	100%	43	100%	0	0%	0	0%	43	100%		
<i>Beckman Coulter</i>	21	21	100%		0%	21	100%		0%		0%	21	100%	21	100%		0%		0%	21	100%		
<i>Behring</i>	22	22	100%		0%	22	100%		0%		0%	22	100%	22	100%		0%		0%	22	100%		
Turbidimetry	37	37	100%	0	0%	37	100%	0	0%	0	0%	37	100%	37	100%	0	0%	0	0%	37	100%		
<i>Beckman Coulter</i>	13	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%		0%	13	100%		
<i>Roche</i>	23	23	100%		0%	23	100%		0%		0%	23	100%	23	100%		0%		0%	23	100%		
<i>Others</i>	1	1	100%		0%	1	100%		0%		0%	1	100%	1	100%		0%		0%	1	100%		
Other Methods	6	6	100%	0	0%	6	100%	0	0%	0	0%	6	100%	6	100%	0	0%	0	0%	6	100%		
Analyte Total	223	223	100%	0	0%	222	100%	1	0%	0	0%	223	100%	222	100%	1	0%	2	1%	221	99%		

Rheumatoid Factor Latex Agglutination Procedure

The number of laboratories that reported titers is listed for positive test samples 28 and 30. The dilution schemes laboratories used are represented by the letter A (IU/ml) and B (titer), testing systems with 10 or more laboratories reporting titers are listed in this table.

<i>Manufacturer</i>	No. Labs	A	Sample 28 Titers						Sample 30 Titers					
			40	80	160	320	640	1280	40	80	160	320	640	1280
		B	4	8	16	32	64	128	4	8	16	32	64	128
<i>Fisher</i>	36	A		1	9	8					12	8		
		B			3	9	2				6	6	2	
<i>Becton Dickson</i>	15	A	4	4	6	1			4	6	5			
		B												

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 samples 28 and 30. The Mean values \pm S.D. are given where 10 or more laboratories reported quantitative results. Outlier values are omitted.

Method <i>Manufacturer</i>	No. Labs	IU/ml Sample 28	IU/ml Sample 30
Nephelometry <i>Beckman Coulter IMMAGE</i>	15	317 \pm 20	275 \pm 20
Turbidimetry <i>Roche Diag. Cobas</i>	14	142 \pm 8.6	161 \pm 9.7

Rubella IgG Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	11 N				12 N				13 R				14 N				15 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
Chemiluminescence	62	62	100%	0	0%	62	100%	0	0%	0	0%	56	90%	62	100%	0	0%	61	98%	1	2%
<i>Bayer</i>	28	28	100%		0%	28	100%		0%		0%	28	100%	28	100%		0%	27	96%	1	4%
<i>Beckman [1]</i>	12	12	100%		0%	12	100%		0%	0	0%	6	50%	12	100%		0%	12	100%		0%
<i>Diagnostic Products</i>	22	22	100%		0%	22	100%		0%		0%	22	100%	22	100%		0%	22	100%		0%
EIA	57	56	98%	1	2%	57	100%	0	0%	0	0%	57	100%	57	100%	0	0%	57	100%	0	0%
<i>Abbott</i>	24	24	100%		0%	24	100%		0%		0%	24	100%	24	100%		0%	24	100%		0%
<i>Diamedix</i>	13	13	100%		0%	13	100%		0%		0%	13	100%	13	100%		0%	13	100%		0%
<i>Wampole/Zeus</i>	11	10	91%	1	9%	11	100%		0%		0%	11	100%	11	100%		0%	11	100%		0%
<i>Others</i>	9	9	100%		0%	9	100%		0%		0%	9	100%	9	100%		0%	9	100%		0%
ELFA	33	33	100%	0	0%	33	100%	0	0%	0	0%	33	100%	33	100%	0	0%	32	97%	1	3%
<i>bioMérieux Vidas</i>	33	33	100%		0%	33	100%		0%		0%	33	100%	33	100%		0%	32	97%	1	3%
Latex Agglutination	40	40	100%	0	0%	40	100%	0	0%	0	0%	40	100%	40	100%	0	0%	40	100%	0	0%
<i>Fisher</i>	18	18	100%		0%	18	100%		0%		0%	18	100%	18	100%		0%	18	100%		0%
<i>Others</i>	22	22	100%		0%	22	100%		0%		0%	22	100%	22	100%		0%	22	100%		0%
Other Methods	8	8	100%		0%	8	100%		0%		0%	8	100%	8	100%		0%	8	100%		0%
Analyte Total	200	199	100%	1	1%	200	100%	0	0%	0	0%	194	97%	200	100%	0	0%	198	99%	2	1%

[1] Six laboratories reported an equivocal/indeterminate result for positive sample #13.

Rubella IgG Antibody

Results are summarized for positive test sample 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 13
<i>Manufacturer</i>	<i>Labs</i>		
Chemiluminescence			
<i>Bayer</i>	24	IU/ml	38 \pm 3.18
<i>Diagnostic Products</i>	18	IU/ml	15 \pm 1.38
EIA			
<i>Abbott AxSYM</i>	11	IU/ml	13 \pm 1.68

Rubella IgM Specific

Participant Results/ Sample Number																					
R = Reactive/ Positive; N = Non-Reactive/ Negative																					
Method	No. Labs	56 N				57 N				58 R				59 N				60 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
EIA	14	14	100%	0	0%	14	100%	0	0%	0	0%	14	100%	14	100%	0	0%	14	100%	0	0%
<i>Other</i>	14	14	100%		0%	14	100%		0%		0%	14	100%	14	100%		0%	14	100%		0%
Other Methods	8	8	100%		0%	8	100%		0%		0%	8	100%	8	100%		0%	8	100%		0%
Analyte Total	22	22	100%	0	0%	22	100%	0	0%	0	0%	22	100%	22	100%	0	0%	22	100%	0	0%

Syphilis - Reagin Antibody

		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
Method	No. Labs	1 N				2 R				3 N				4 R				5 N			
		N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%
RPR	273	271	99%	2	1%	1	0%	272	100%	273	100%	0	0%	1	0%	272	100%	271	99%	2	1%
<i>ASI</i>	37	36	97%	1	3%	1	3%	36	97%	37	100%		0%	1	3%	36	97%	36	97%	1	3%
<i>Becton Dickinson</i>	139	139	100%		0%		0%	139	100%	139	100%		0%		0%	139	100%	138	99%	1	1%
<i>Fisher</i>	49	49	100%		0%		0%	49	100%	49	100%		0%		0%	49	100%	49	100%		0%
<i>True Medix</i>	16	16	100%		0%		0%	16	100%	16	100%		0%		0%	16	100%	16	100%		0%
<i>Wampole/Zeus</i>	20	19	95%	1	5%		0%	20	100%	20	100%		0%		0%	20	100%	20	100%		0%
<i>Others</i>	12	12	100%		0%		0%	12	100%	12	100%		0%		0%	12	100%	12	100%		0%
Other Methods	2	2	100%		0%		0%	2	100%	2	100%		0%		0%	2	100%	2	100%		0%
Analyte Total	275	273	99%	2	1%	1	0%	274	100%	275	100%	0	0%	1	0%	274	100%	273	99%	2	1%

Syphilis - Reagin Antibody

RPR Procedures

The number of laboratories that reported titers is listed for positive test samples 2 and 4 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 2 Titers						Sample 4 Titers					
		2	4	8	16	32	64	2	4	8	16	32	64
<i>ASI</i>	25	1	2	18	3			2	17	4	1		
<i>Becton Dickinson</i>	126	1	7	104	11	3		7	103	15	1		
<i>Fisher</i>	49		10	33	5	1		9	33	6	1		
<i>True Medix</i>	16		2	8	6			3	8	4	1		
<i>Wampole/ Zeus</i>	21	2	3	14	2			2	13	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

Method <i>Manufacturer</i>		Participant Results/ Sample Number																			
		R = Reactive/ Positive; N = Non-Reactive/ Negative																			
		1 N				2 R				3 N				4 R				5 N			
No. Labs	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	N	%	R	%	
EIA	9	9	100%	0	0%	1	11%	8	89%	9	100%	0	0%	0	0%	9	100%	9	100%	0	0%
<i>Other</i>	9	9	100%		0%	1	11%	8	89%	9	100%		0%		0%	9	100%	9	100%		0%
Gel. Part. Agglut.	35	34	97%	1	3%	1	3%	34	97%	35	100%	0	0%	1	3%	34	97%	34	97%	1	3%
<i>Fujirebio</i>	35	34	97%	1	3%	1	3%	34	97%	35	100%		0%	1	3%	34	97%	34	97%	1	3%
IFA	25	25	100%	0	0%	0	0%	25	100%	25	100%	0	0%	0	0%	25	100%	25	100%	0	0%
<i>Wampole/Zeus</i>	25	25	100%		0%		0%	25	100%	25	100%		0%		0%	25	100%	25	100%		0%
MHA	10	10	100%	0	0%	0	0%	10	100%	10	100%	0	0%	0	0%	10	100%	10	100%	0	0%
<i>Olympus</i>	10	10	100%		0%		0%	10	100%	10	100%		0%		0%	10	100%	10	100%		0%
Other Methods	7	7	100%		0%		0%	7	100%	7	100%		0%		0%	7	100%	7	100%		0%
Analyte Total	86	85	99%	1	1%	2	2%	84	98%	86	100%	0	0%	1	1%	85	99%	85	99%	1	1%

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. Labs	76	77	78	79	80
Alpha-1-Antitrypsin						
Nephelometry/Behring Nephelometer	19	214 \pm 17	185 \pm 12	259 \pm 15	< 17	< 17
Nephelometry/ <i>Total</i>	30	193 \pm 31	186 \pm 12	232 \pm 40	< 17	< 17
Turbidimetry/ <i>Total</i>	6	174 \pm 7.8	176 \pm 11	200 \pm 9.4	< 30	< 30
Complement C'3						
Nephelometry/Beckman Coulter <i>IMMAGE</i>	20	338 \pm 15	116 \pm 4.6	234 \pm 9.1	32 \pm 1.6	38 \pm 1.2
Nephelometry/Behring Nephelometer	18	375 \pm 24	120 \pm 5.9	240 \pm 7.4	33 \pm 2.1	38 \pm 1.9
Turbidimetry/Roche Cobas <i>Integra</i>	12	394 \pm 12	122 \pm 3.6	246 \pm 7.0	31 \pm 1.5	37 \pm 1.4
Nephelometry/ <i>Total</i>	53	358 \pm 27	117 \pm 5.9	236 \pm 9.3	32 \pm 2.1	38 \pm 1.8
Turbidimetry/ <i>Total</i>	44	390 \pm 26	118 \pm 6.1	249 \pm 17	33 \pm 3.7	39 \pm 3.3
Complement C'4						
Nephelometry/Beckman Coulter <i>IMMAGE</i>	20	42 \pm 1.0	34 \pm 1.4	121 \pm 6.6	< 10	< 10
Nephelometry/Behring Nephelometer	16	37 \pm 1.1	31 \pm 1.7	113 \pm 12	< 10	< 10
Turbidimetry/Roche Cobas <i>Integra</i>	11	41 \pm 0.8	33 \pm 0.7	115 \pm 2.6	< 6	< 6
Nephelometry/ <i>Total</i>	54	40 \pm 3.1	32 \pm 2.2	113 \pm 11.6	< 10	< 10
Turbidimetry/ <i>Total</i>	41	39 \pm 3.6	31 \pm 2.8	109 \pm 13	< 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	85
Immunoglobulin A (mg/dl)							
Nephelometry/Beckman Coulter IMMAGE	22		306 \pm 9.3	111 \pm 3.6	610 \pm 34	102 \pm 3.3	47 \pm 2.1
Nephelometry/Behring Nephelometer	19		289 \pm 16	121 \pm 9.7	717 \pm 84	108 \pm 5.5	49 \pm 2.7
Nephelometry/Behring BN Prospec	10		296 \pm 7.2	118 \pm 7.1	732 \pm 95	105 \pm 3.5	49 \pm 0.7
Turbidimetry/Roche Cobas Integra	14		292 \pm 7.0	103 \pm 3.4	551 \pm 40	93 \pm 2.9	44 \pm 2.1
Nephelometry/ Total	64		300 \pm 16	115 \pm 9.0	653 \pm 96	105 \pm 5.6	49 \pm 2.5
Turbidimetry/ Total	49		295 \pm 13	107 \pm 6.5	571 \pm 50	98 \pm 5.9	49 \pm 4.5
Immunoglobulin E (IU/ml)							
Chemiluminescence/Bayer	10		5.6 \pm 1.6	694 \pm 45	435 \pm 23	22 \pm 1.5	26 \pm 1.5
Chemiluminescence/Diag. Prod. Co.	31		8.2 \pm 0.7	683 \pm 57	388 \pm 36	28 \pm 2.1	29 \pm 1.7
FEIA/Pharmacia	10		11 \pm 0.7	651 \pm 44	434 \pm 45	32 \pm 3.5	28 \pm 2.7
Chemiluminescence/ Total	44		7.8 \pm 1.0	680 \pm 60	401 \pm 38	26 \pm 3.6	28 \pm 2.3
FEIA/ Total	16		10 \pm 1.2	654 \pm 46	440 \pm 24	32 \pm 1.9	28 \pm 2.3
Nephelometry/ Total	13		< 20	660 \pm 43	427 \pm 64	25 \pm 1.9	27 \pm 2.0
Immunoglobulin G (mg/dl)							
Nephelometry/Beckman Coulter IMMAGE	22		1108 \pm 59	642 \pm 36	2383 \pm 124	643 \pm 28	261 \pm 25
Nephelometry/Behring Nephelometer	21		1140 \pm 71	672 \pm 30	3022 \pm 218	693 \pm 39	258 \pm 12
Nephelometry/Behring BN Prospec	10		1143 \pm 55	687 \pm 29	3002 \pm 192	691 \pm 33	258 \pm 11
Turbidimetry/Roche Cobas Integra	14		1047 \pm 21	621 \pm 12	2552 \pm 45	617 \pm 16	229 \pm 4.3
Nephelometry/ Total	65		1119 \pm 67	664 \pm 40	2706 \pm 357	664 \pm 45	257 \pm 17
Turbidimetry/ Total	47		1065 \pm 50	614 \pm 26	2477 \pm 203	612 \pm 25	238 \pm 14
Immunoglobulin M (mg/dl)							
Nephelometry/Beckman Coulter IMMAGE	22		118 \pm 3.7	135 \pm 5.4	214 \pm 11	46 \pm 2.5	26 \pm 1.9
Nephelometry/Behring Nephelometer	20		109 \pm 6.6	134 \pm 6.3	305 \pm 12	46 \pm 3.0	27 \pm 1.5
Nephelometry/Behring BN Prospec	10		108 \pm 2.6	128 \pm 4.3	286 \pm 21	43 \pm 2.1	25 \pm 1.5
Turbidimetry/Roche Cobas Integra	14		113 \pm 3.9	136 \pm 6.0	168 \pm 4.5	37 \pm 1.4	20 \pm 2.4
Nephelometry/ Total	63		114 \pm 8.3	134 \pm 6.7	259 \pm 45	45 \pm 2.9	26 \pm 1.7
Turbidimetry/ Total	47		113 \pm 4.3	134 \pm 8.5	198 \pm 31	40 \pm 4.1	25 \pm 3.7

Acceptable Response (September 13, 2006 PT Event)
Quantitative Tests Results (Acceptable Range)

Analytes	Sample NO.				
Method/ Manufacture					
Alpha-1-Antitrypsin	76	77	78	79	80
Nephelometry/Dade Behring Neph.	163 - 265	150 - 221	216 - 303	< 17	< 17
Nephelometry/ Total	100 - 287	151 - 222	113 - 350	< 17	< 17
Turbidimetry/ Total	150 - 198	146 - 207	172 - 229	< 30	< 30
Complement C'3	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	294 - 382	101 - 130	207 - 262	26 - 37	34 - 42
Nephelometry/Dade Behring Neph.	304 - 445	102 - 138	218 - 263	26 - 39	32 - 44
Turbidimetry/Roche Cobas Integra	359 - 429	110 - 133	225 - 268	26 - 36	32 - 42
Nephelometry/ Total	276 - 440	99 - 135	208 - 264	25 - 39	32 - 44
Turbidimetry/ Total	312 - 467	100 - 137	199 - 298	22 - 45	29 - 49
Complement C'4	76	77	78	79	80
Nephelometry/Beckman Coulter Immage	39 - 46	29 - 38	101 - 141	< 10	< 10
Nephelometry/Dade Behring Neph.	34 - 41	26 - 37	77 - 148	< 10	< 10
Turbidimetry/Roche Cobas Integra	38 - 44	31 - 36	107 - 124	< 6	< 6
Nephelometry/ Total	30 - 49	25 - 39	78 - 148	< 10	< 10
Turbidimetry/ Total	27 - 50	23 - 40	72 - 145	< 10	< 10
Immunoglobulin A	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	278 - 334	100 - 122	509 - 711	92 - 112	41 - 54
Nephelometry/Dade Behring Neph .	241 - 337	92 - 150	466 - 968	91 - 125	40 - 58
Nephelometry/Dade Behring BN P.	274 - 318	96 - 139	448 - 1015	94 - 115	47 - 52
Turbidimetry/Roche Cobas Integra	271 - 314	92 - 113	433 - 669	83 - 102	37 - 51
Nephelometry/ Total	252 - 347	88 - 142	366 - 939	88 - 122	41 - 56
Turbidimetry/ Total	258 - 332	88 - 127	420 - 721	79 - 116	35 - 63
Immunoglobulin E	81	82	83	84	85
Chemiluminescence/Bayer Advia Centaur	1 - 11	559 - 829	366 - 504	17 - 27	21 - 31
Chemiluminescence/Diag.Prod. Immulite	6 - 10	512 - 855	281 - 494	21 - 35	24 - 34
FEIA/Pharmacia Immunocap	8 - 14	519 - 784	300 - 568	21 - 42	19 - 36
Chemiluminescence/ Total	4 - 11	506 - 854	287 - 516	15 - 37	21 - 35
FEIA/ Total	6 - 11	516 - 792	366 - 513	26 - 38	21 - 35
Nephelometry/ Total	< 20	533 - 787	238 - 618	19 - 31	21 - 33
Immunoglobulin G	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	830 - 1385	481 - 803	1787 - 2979	482 - 804	195 - 326
Nephelometry/Dade Behring Neph .	855 - 1426	504 - 841	2266 - 3777	519 - 867	193 - 323
Nephelometry/Dade Behring BN P.	857 - 1429	515 - 859	2251 - 3753	518 - 864	193 - 323
Turbidimetry/Roche Cobas Integra	785 - 1310	465 - 777	1914 - 3191	462 - 772	172 - 287
Nephelometry/ Total	839 - 1399	497 - 830	2029 - 3383	498 - 831	192 - 321
Turbidimetry/ Total	798 - 1331	460 - 768	1857 - 3096	459 - 766	178 - 298
Immunoglobulin M	81	82	83	84	85
Nephelometry/Beckman Coulter Immage	106 - 129	119 - 152	181 - 247	38 - 54	20 - 32
Nephelometry/Dade Behring Neph .	89 - 130	115 - 154	273 - 344	37 - 56	22 - 32
Nephelometry/Dade Behring BN P.	100 - 116	115 - 142	225 - 347	36 - 50	20 - 30
Turbidimetry/Roche Cobas Integra	101 - 125	118 - 155	154 - 182	32 - 41	13 - 28
Nephelometry/ Total	88 - 139	114 - 155	126 - 393	36 - 55	21 - 32
Turbidimetry/ Total	99 - 125	108 - 160	107 - 290	28 - 53	14 - 37

Acceptable Response (September 13, 2006 PT Event)
Qualitative / Quantitative Tests Results

Analytes	Sample NO.				
	1	2	3	4	5
Syphilis - Reagin Ab	N	R	N	R	N
<i>RPR Titer</i>		4 - 16		2 - 8	
Syphilis - Treponemal	N	R	N	R	N
	6	7	8	9	10
HBcAb	N	N	R	N	R
HBsAg	N	N	R	N	R
	11	12	13	14	15
CMV	N	R	R	N	N
Rubella Ab	N	N	R	N	N
	16	17	18	19	20
ASO	R	N	N	N	R
<i>Latex Agglutination as IU/ml</i>	100 - 1600				100 - 1600
	26	27	28	29	30
Infectious Mono.	N	N	R	R	N
<i>Latex Agglutination Titer</i>			4 - 64	4 - 64	
Rheumatoid Factor	N	N	R	N	R
<i>Latex Agglutination Titer</i>			8 - 128		4 - 64
<i>Latex Agglutination as IU/ml</i>			40 - 640		40 - 640
	31	32	33	34	35
HIV Ab Screening/Confirmation	N	R	R	N	N
	36	37	38	39	40
HTLV 1 Ab	R	N	N	N	N
	41	42	43	44	45
LYME Disease Ab	R	N	R	N	N
LYME Disease Ab WB IgG	R	N	R	N	N
LYME Disease Ab WB IgM	R	N	N	N	N
	46	47	48	49	50
ANA	N	R	R	N	N
<i>EIA Titer</i>		40 - 640	40 - 640		
<i>IFA Titer</i>		40 - 1280	40 - 1280		
	56	57	58	59	60
Rubella IgM	N	N	R	N	N
	61	62	63	64	65
HIV p24 Ag	N	N	R	N	N
	66	67	68	69	70
HBeAg	R	N	R	N	N
	71	72	73	74	75
Hepatitis C Ab	R	R	N	N	N

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