

**Table 1. Summary of calcium quality (weighted averages) from 5 national PT survey programs**

<b>PT Program</b>	<b>Labs</b>	<b>Group Mean</b>	<b>Nat. Test</b>	<b>Loc. Method</b>	<b>Nat. Method</b>	<b>Datasheet</b>
AAFP 2004A	164	10.2	2.50	2.71	2.35	1
MLE 2004A	528	10.5	2.44	3.50	2.69	2
AAB 3rd 2004	1444	11.1	2.78	3.37	2.95	3
API 3rd 2004	2695	11.1	2.63	3.45	2.98	4
CAP1st2004C-04	4955	10.4	3.03	4.30	3.07	5
<b>Group summary</b>	<b>9786</b>	<b>10.7</b>	<b>2.84</b>	<b>3.86</b>	<b>3.00</b>	
<b><i>NY Benchmark</i></b>	<b>391</b>	<b>9.94</b>	<b>3.57</b>	<b>4.73</b>	<b>4.08</b>	<b>6</b>

**Datasheet 1. Calcium PT results from AAFP survey 2004 Event B Specimen CH-8**

CLIA allowable total error, TEa 1 mg/dL

<b>Instrument</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>Sig wo/B</b>	<b>Bias</b>	<b>Sig w/B</b>
All Methods	164	10.2	0.4	<b>2.50</b>	NA	NA
Alfa Wasserman Ace-Alfa w Rgt	33	10.2	0.3	<b>3.33</b>	0.00	<b>3.33</b>
Biochem/ELAN ATAC 8000	33	10.5	0.4	<b>2.50</b>	0.30	<b>1.75</b>
Dade Dimension/AR/ES/RxL/Xpand	13	10.2	0.3	<b>3.33</b>	0.00	<b>3.33</b>
Roche Cobas Mira – DMA Reagent	8	9.8	0.4	<b>2.50</b>	0.40	<b>1.50</b>
Roche Cobas Mira – Roche Rgt	14	10.1	0.4	<b>2.50</b>	0.10	<b>2.25</b>
Roche Cobas Mira -Other Rgt	5	9.4	1.6	<b>0.63</b>	0.80	<b>0.13</b>
Roche Mira - Roche Rgt/MASC cal	21	10	0.4	<b>2.50</b>	0.20	<b>2.00</b>
Vitros 250,400,500,550,700	9	10.2	0.4	<b>2.50</b>	0.00	<b>2.50</b>
Average performance figures				2.47	0.23	2.10
<b>WEIGHTED AVERAGE PERFORMANCE</b>	136		0.41	<b>2.71</b>	0.17	<b>2.35</b>

**Datasheet 2. Calcium results from MLE 2004 M2 Survey CH-7**

CLIA allowable Total Error, TEa 2004 MLE-M2		1.0	mg/dL				
<b>Instrument</b>	<b>Labs</b>	<b>Mean mg/dL</b>	<b>CV</b>	<b>SD mg/dL</b>	<b>Sig wo/B</b>	<b>Bias</b>	<b>Sig w/B</b>
All Methods	528	10.50	3.9	0.41	<b>2.44</b>	NA	NA
Abaxis Piccolo	6	11.15	3.0	0.33	<b>2.99</b>	0.65	<b>1.05</b>
Abbott Aeroset	11	10.65	1.4	0.15	<b>6.71</b>	0.15	<b>5.70</b>
Chiron Diag 550 Expres	9	10.50	2.2	0.23	<b>4.33</b>	0.00	<b>4.33</b>
Beckman Synchron	16	10.38	2.3	0.24	<b>4.19</b>	0.12	<b>3.69</b>
Dade Analyst	12	10.67	3.0	0.32	<b>3.12</b>	0.17	<b>2.59</b>
Dade Dimension/AR/ES/RxL/Xpa	62	10.64	2.7	0.29	<b>3.48</b>	0.14	<b>2.99</b>
DCL Roche Cobas Fara/Mira/Bio	12	10.06	4.4	0.44	<b>2.26</b>	0.44	<b>1.27</b>
ATAC 1500, 2000, 6000	12	10.97	3.8	0.42	<b>2.40</b>	0.47	<b>1.27</b>
ATAC 8000	58	10.87	3.0	0.33	<b>3.07</b>	0.37	<b>1.93</b>
Olympus AU	6	10.30	1.6	0.16	<b>6.07</b>	0.20	<b>4.85</b>
All Pointe Scientific/Landmark insts	6	10.17	6.3	0.64	<b>1.56</b>	0.33	<b>1.05</b>
Roche Cobas Fara/Mira/Bio	86	10.44	3.5	0.37	<b>2.74</b>	0.06	<b>2.57</b>
Roche Integra	11	11.12	1.6	0.18	<b>5.62</b>	0.62	<b>2.14</b>
Schiap/Alpha Wass. ACE/NexC	57	10.29	2.7	0.28	<b>3.60</b>	0.21	<b>2.84</b>
Thermo DNA Roche Cobas Fara/Mira/Bio	9	10.03	3.8	0.38	<b>2.62</b>	0.47	<b>1.39</b>
VITROS 250,400,500,700,750...	62	10.22	2.2	0.22	<b>4.45</b>	0.28	<b>3.20</b>
VITROS DT/DTII/DT60	5	10.12	6.2	0.63	<b>1.59</b>	0.38	<b>0.99</b>
Average performance figures				0.33	3.58	0.30	2.58
<b>WEIGHTED AVERAGE PERFORMANCE</b>	440			0.31	<b>3.50</b>	0.23	<b>2.69</b>

**Datasheet 3. Calcium PT results from AAB 2004 3rd survey Specimen 2**

CLIA allowable Total Error, TEa	1.0	mg/dL				
Specimen 1						
<b>Instrument</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>Sig wo/B</b>	<b>Bias</b>	<b>Sig w/B</b>
All Methods	1444	11.13	0.36	<b>2.78</b>	NA	NA
Alfa Wasserman Arsenazo	105	10.93	0.30	<b>3.33</b>	0.20	<b>2.67</b>
Beckman Arsenazo	107	11.17	0.26	<b>3.85</b>	0.04	<b>3.69</b>
Carolina Arsenazo III	40	11.28	0.30	<b>3.33</b>	0.15	<b>2.83</b>
DCL #140 Arsenazo III	25	11.03	0.47	<b>2.13</b>	0.10	<b>1.91</b>
DMA Arsenazo III	40	11.03	0.44	<b>2.27</b>	0.10	<b>2.05</b>
Elan Arsenazo	18	11.18	0.29	<b>3.45</b>	0.05	<b>3.28</b>
JAS Arsenazo III	14	11.22	0.55	<b>1.82</b>	0.09	<b>1.65</b>
J&J Vitros Arsenazo	213	11.00	0.24	<b>4.17</b>	0.13	<b>3.63</b>
Olympus Arsenazo	51	11.03	0.21	<b>4.76</b>	0.10	<b>4.29</b>
Point Sci Arsenazo	19	10.88	0.69	<b>1.45</b>	0.25	<b>1.09</b>
Roche Cobas Arsenazo III	74	11.09	0.34	<b>2.94</b>	0.04	<b>2.82</b>
Bayer Express OCPC	23	11.00	0.46	<b>2.17</b>	0.13	<b>1.89</b>
Dade Behring OCPC	265	11.12	0.30	<b>3.33</b>	0.01	<b>3.30</b>
DMA OCPC	13	10.95	0.30	<b>3.33</b>	0.18	<b>2.73</b>
Elan OCPC	77	11.51	0.38	<b>2.63</b>	0.38	<b>1.63</b>
Hemagen Analyst	11	11.56	0.47	<b>2.13</b>	0.43	<b>1.21</b>
Olympus OCPC-based	14	11.01	0.28	<b>3.57</b>	0.12	<b>3.14</b>
Pointe Sci oCPC	29	11.46	0.66	<b>1.52</b>	0.33	<b>1.02</b>
Roche Cobas OCPC	63	11.41	0.41	<b>2.44</b>	0.28	<b>1.76</b>
Roche/Hitachi OCPC	51	11.65	0.40	<b>2.50</b>	0.52	<b>1.20</b>
Beckman ISE	103	11.03	0.21	<b>4.76</b>	0.10	<b>4.29</b>
Average performance figures				2.95	0.18	2.48
<b>WEIGHTED AVERAGE PERFORMANCE</b>	1355		0.32	<b>3.37</b>	0.14	<b>2.95</b>

#### Datasheet 4. Calcium results from API Sample CH-11 3rd Event 2004

CLIA allowable Total Error, TEa	1.0	mg/dL				
<b>Instrument w/B</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>Sig wo/B</b>	<b>Bias</b>	<b>Sig</b>
		<b>mg/dL</b>	<b>mg/dL</b>		<b>mg/dL</b>	
<b>All Participants</b>	2695	11.12	0.38	<b>2.63</b>		
Abaxis Piccolo/Abaxis Piccolo reagent	52	11.28	0.30	3.33	0.16	2.80
Abbott Aeroset/Abbott Aeroset reagent	25	11.42	0.23	4.35	0.30	3.04
Alfa Wassermann ACE, NEXCT/Alfa Was,NEXCT	336	10.91	0.33	3.03	0.21	2.39
Bayer-Chiron 550 Express/Bayer-Chiron 550 Exp reagent 2.03	58	10.79	0.33	3.03	3.03	0.33
Bayer-Chiron 550 Express/Pointe Scientific CPC	10	10.56	1.12	0.89	0.56	0.39
Beckman Synchron CX/Beckman Arsenazo	85	11.23	0.21	4.76	0.11	4.24
Beckman Synchron CX/Beckman ISE	184	11.04	0.25	4.00	0.08	3.68
Beckman Synchron CX/Carolina reagent	39	11.29	0.46	2.17	0.17	1.80
Beckman Synchron LX/Beckman ISE	50	11.13	0.16	6.25	0.01	6.19
Clinical Data ATAC 6000/Clinical Data 6000	23	11.19	0.43	2.33	0.07	2.16
Clinical Data ATAC 8000/Clinical Data 8000	261	11.50	0.33	3.03	0.38	1.88
Clinical Data ATAC 8000/JAS Diagnostics Arsen	5	11.56	0.43	2.33	0.44	1.30
Dade Dimension/Dade Dimension reagent	511	11.09	0.27	3.70	0.03	3.59
Hemagen Analyst/Hemagen Analyst reagent	14	11.51	0.80	1.25	0.39	0.76
OCD Vitros 250-950/OCD Vitros 250 - 950 slide	428	11.03	0.24	4.17	0.09	3.79
OCD Vitros DT 60, 60 II/OCD Vitros DT60 slide	18	10.95	0.45	2.22	0.17	1.84
Olympus AU400, 600, 1000, 2700/Olympus Arsen	58	11.05	0.26	3.85	0.07	3.58
Poly-Chem/Polymedco Arsenazo	6	11.13	0.33	3.03	0.01	3.00
Poly-Chem/Polymedco Cresolphthalein	22	11.28	0.23	4.35	0.16	3.65
Roche Cobas Mira, +/DCL Arsenazo	50	10.75	0.61	1.64	0.37	1.03
Roche Cobas Mira, +/DMA Calcium Plus (#1265)	35	10.88	0.73	1.37	0.24	1.04
Roche Cobas Mira, +/JAS Diagnostics Arsenazo	13	11.44	0.87	1.15	0.32	0.78
Roche Cobas Mira, +/Roche Cobas Mira rgt	165	11.12	0.40	2.50	0.00	2.50
Roche Cobas Mira, +/Thermo Trace Arsenazo	14	11.08	0.48	2.08	0.04	2.00
Roche Hitachi/Roche Hitachi reagent	39	11.63	0.36	2.78	0.51	1.36
Roche Integra/Roche Integra reagent	79	11.40	0.31	3.23	0.28	2.32
Average performance figures						
<b>WEIGHTED AVERAGE PERFORMANCE</b>	2580		0.31	<b>3.45</b>	0.15	<b>2.98</b>

**Datasheet 5. Calcium PT results from CAP 2004 Event A Specimen C-04 (using group mean)**

CLIA TEa	1.00	mg/dL					
<b>Instrument w/B</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Sig wo/B</b>	<b>Bias</b>	<b>Sig</b>
		<b>mg/dL</b>	<b>mg/dL</b>	<b>%</b>		<b>mg/dL</b>	
All Method Principles	4955	10.36	0.33	3.2	<b>3.03</b>		
All Arsenazo III Dye Methods	1741	10.15	0.32	3.2	3.13	0.21	2.47
All Cresolphthalein Compl Methods	2198	10.56	0.27	2.5	3.70	0.20	2.96
All Ion Select Elect Dil	977	10.26	0.19	1.9	5.26	0.10	4.74
<b>WEIGHTED AVERAGE PERFORMANCE</b>	4916		0.27	2.63	3.81	0.18	3.14
Abbott Aeroset	84	10.62	0.24	2.3	4.17	0.47	2.21
Beck Syn CX3-7D, CX9ALX	61	10.37	0.26	2.5	3.85	0.22	3.00
Beck Syn CX4/5CE, 7/RTS	122	10.52	0.20	1.9	5.00	0.37	3.15
Beckman Synchron CX3	19	10.55	0.15	1.4	6.67	0.40	4.00
Beckman Synchron CX4/5	17	10.49	0.27	2.6	3.70	0.34	2.44
Beckman Synchron LX20	40	10.32	0.14	1.3	7.14	0.17	5.93
OLY 400-640/2700/5400	207	10.42	0.18	1.7	5.56	0.27	4.06
Roche Cobas FARA/MIRA	33	10.45	0.21	2.0	4.76	0.30	3.33
Vitros 250 Chem System	513	10.03	0.23	2.3	4.35	0.12	3.83
Vitros 400, 700 Chem Sy	49	10.03	0.20	2.0	5.00	0.12	4.40
Vitros 500,550 Chem Sy	20	9.98	0.17	1.7	5.88	0.17	4.88
Vitros 950 Chem System	545	9.94	0.22	2.3	4.55	0.21	3.59
Bayer Advia 1650	65	10.37	0.25	2.4	4.00	0.22	3.12
Dade Behrg DIM/AR/MULT	1229	10.52	0.23	2.2	4.35	0.37	2.74
OLY 400-640/2700/5400	34	10.39	0.27	2.6	3.70	0.24	2.81
Olympus AU 5200	22	10.54	0.15	1.4	6.67	0.39	4.07
Roche Cobas Integra	326	10.55	0.29	2.8	3.45	0.40	2.07
Roche Modular	171	10.70	0.23	2.1	4.35	0.55	1.96
Roche/Hitachi 717	24	10.69	0.37	3.4	2.70	0.54	1.24
Roche/Hitachi 747	42	10.64	0.29	2.7	3.45	0.49	1.76
Roche/Hitachi 911	65	10.78	0.32	2.9	3.13	0.63	1.16
Roche/Hitachi 912	53	10.74	0.30	2.8	3.33	0.59	1.37
Roche/Hitachi 917	132	10.69	0.30	2.8	3.33	0.54	1.53
Beck Syn CX3-7D, CX9ALX	348	10.19	1.90	1.9	0.53	0.04	0.51
Beck Syn CX4/5CE, 7/RTS	22	10.27	0.33	3.2	3.03	0.12	2.67
Beckman Synchron LX20	591	10.31	0.16	1.6	6.25	0.16	5.25
Average performance figures			0.30	2.26	4.34	0.32	2.96
<b>WEIGHTED AVERAGE PERFORMANCE</b>	4834		0.35	2.17	<b>4.30</b>	0.28	<b>3.07</b>

**Datasheet 6. Calcium results from NY State Survey 9/20/2004**

CLIA allowable Total Error, TEa	1.0	mg/dL				
Specimen C53						
<b>Instrument</b>	<b>Labs</b>	<b>Mean mg/dL</b>	<b>SD mg/dL</b>	<b>Sig wo/B Bias mg/dL</b>	<b>Sig w/B</b>	
All Methods	391	9.94	0.28	<b>3.57</b>	NA	NA
Abbott Aeroset	7	10.06	0.08	<b>12.50</b>	0.12	<b>11.00</b>
Beckman Coulter CX	59	9.8	0.24	<b>4.17</b>	0.14	<b>3.58</b>
Beckman Coulter LX-20	37	9.86	0.17	<b>5.88</b>	0.08	<b>5.41</b>
Bayer ADVIA 1650	15	10.06	0.24	<b>4.17</b>	0.12	<b>3.67</b>
Bayer ADVIA 2400	3	9.71	0.44	<b>2.27</b>	0.23	<b>1.75</b>
Bayer Express	3	9.5	0.09	<b>11.11</b>	0.44	<b>6.22</b>
Dade Behring Dimension	74	9.82	0.25	<b>4.00</b>	0.12	<b>3.52</b>
Hitachi 717	7	10.18	0.2	<b>5.00</b>	0.24	<b>3.80</b>
Hitachi 747	10	10.2	0.22	<b>4.55</b>	0.26	<b>3.36</b>
Hitachi 911	4	10.4	0.4	<b>2.50</b>	0.46	<b>1.35</b>
Hitachi 917	8	10.17	0.19	<b>5.26</b>	0.23	<b>4.05</b>
Hitachi MODULAR	23	10.15	0.17	<b>5.88</b>	0.21	<b>4.65</b>
Johnson & Johnson Vitros	70	10.03	0.22	<b>4.55</b>	0.09	<b>4.14</b>
Olympus AU400/600/640/2700/5400	30	9.84	0.23	<b>4.35</b>	0.10	<b>3.91</b>
Olympus AU5000/5200	5	10.13	0.11	<b>9.09</b>	0.19	<b>7.36</b>
Roche Cobas INTEGRA	11	10.05	0.24	<b>4.17</b>	0.11	<b>3.71</b>
Roche Cobas MIRA	10	9.76	0.37	<b>2.70</b>	0.18	<b>2.22</b>
Alfa Wasserman ACE	3	10.07	0.42	<b>2.38</b>	0.13	<b>2.07</b>
Average performance figures			0.24	5.25	0.19	4.21
<b>WEIGHTED AVERAGE PERFORMANCE</b>	379		<b>0.23</b>	<b>4.73</b>	0.14	<b>4.08</b>