



Comprehensive Chemistry

Name	Line No.	Specimen 1			Specimen 2			Specimen 3			Specimen 4			Specimen 5			No. of Labs
		Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	
Alpha-fetoprotein																	
Initial Grouping by Reagent																	
Roche Elecsys	1	148.3 - 232.0	S 190.12	13.96	61.0 - 98.3	S 79.66	6.21	236.5 - 346.5	S 291.47	18.34	33.5 - 50.3	S 41.89	2.81	200.8 - 324.8	S 262.81	20.68	12
Initial Grouping by Sensitivity or Principle																	
Luminometric	2	120.3 - 238.6	S 179.47	19.71	50.4 - 100.0	S 75.21	8.28	192.5 - 360.5	S 276.5	28.01	27.6 - 51.7	S 39.62	4.01	184.4 - 320.9	S 252.67	22.74	19
Total Population																	
Whole Population	3	116.6 - 240.6	S 178.59	20.66	48.0 - 100.5	S 74.24	8.74	189.7 - 357.6	S 273.65	27.99	26.2 - 52.2	S 39.21	4.32	169.8 - 324.6	S 247.18	25.8	28
Amylase																	
Initial Grouping by Reagent and Instrument																	
Abbott Aeroset/Architect & Abbott Architect c, ci, i	1	74 - 137	P 105.6	2.1	36 - 67	P 51.3	1.2	111 - 207	P 159.2	3.4	24 - 44	P 33.8	1.1	100 - 186	P 143.3	2.8	12
Beckman Olympus & Beck Olym AU 400/600/5400	2	56 - 105	P 80.4	3.4	27 - 51	P 38.9	1.6	85 - 157	P 121.0	5.8	18 - 33	P 25.3	1.3	76 - 141	P 108.5	5.2	18
Beckman Olympus & Beckman AU 480	3	57 - 105	P 81.1	4.3	27 - 51	P 39.0	2.0	85 - 159	P 122.0	6.7	18 - 33	P 25.6	1.4	77 - 143	P 109.8	6.0	16
Ortho Vitros & Ortho Vitros 3600, 5600	4	43 - 79	P 60.8	4.8	21 - 39	P 30.1	0.3	68 - 125	P 96.5	4.3	21 - 39	P 30.0	0.0	60 - 111	P 85.6	6.0	15
Ortho Vitros & Ortho Vitros not DT or ECi	5	44 - 82	P 63.1	5.4	23 - 43	P 32.7	3.9	67 - 124	P 95.4	6.7	21 - 39	P 30.0	0.0	60 - 112	P 86.4	6.0	14
Roche Cobas & Roche e/c, 1XX, X000, Elec series	6	67 - 125	P 96.3	1.5	33 - 62	P 47.5	0.9	102 - 189	P 145.3	2.4	22 - 41	P 31.7	0.6	91 - 169	P 130.3	2.0	11
Siemens Dimension & Siemens Dimension EXL	7	76 - 142	P 109.0	2.0	37 - 68	P 52.2	1.5	115 - 214	P 164.7	2.7	23 - 43	P 33.3	1.3	104 - 194	P 149.2	2.2	54
Siemens Dimension & Siemens Dimension Xpand	8	76 - 141	P 108.5	2.6	36 - 67	P 51.6	1.7	115 - 213	P 163.9	3.0	23 - 43	P 32.7	1.6	103 - 192	P 147.8	3.4	11
Initial Grouping by Reagent																	
Abbott Aeroset/Architect	9	74 - 137	P 105.6	2.1	36 - 67	P 51.3	1.2	111 - 207	P 159.2	3.4	24 - 44	P 33.8	1.1	100 - 186	P 143.3	2.8	12
Beckman Olympus	10	57 - 106	P 81.2	4.3	27 - 51	P 39.2	2.0	86 - 159	P 122.3	6.9	18 - 33	P 25.6	1.5	77 - 143	P 109.8	6.2	36
Ortho Vitros	11	43 - 81	P 62.1	5.0	22 - 41	P 31.2	2.9	67 - 125	P 95.9	5.4	21 - 39	P 30.0	0.0	60 - 112	P 86.2	5.9	33
Roche Cobas	12	67 - 125	P 96.3	1.6	33 - 62	P 47.6	0.9	101 - 189	P 145.0	2.6	22 - 41	P 31.9	0.7	91 - 170	P 130.5	2.6	25
Siemens Dimension	13	76 - 141	P 108.8	2.1	36 - 68	P 52.0	1.6	115 - 214	P 164.4	2.9	23 - 43	P 33.1	1.4	104 - 193	P 148.8	2.7	70
Initial Grouping by Sensitivity or Principle																	
Standardized methods	14	73 - 136	P 104.5	9.5	36 - 68	P 52.0	5.3	110 - 205	P 157.7	14.8	25 - 47	P 36.0	6.8	100 - 185	P 142.6	13.3	43
All Beckman	15	57 - 106	P 81.2	4.3	27 - 51	P 39.2	2.0	86 - 159	P 122.3	6.9	18 - 33	P 25.6	1.5	77 - 143	P 109.8	6.2	36
Vitros and related	16	43 - 81	P 62.1	5.0	22 - 41	P 31.2	2.9	67 - 125	P 95.9	5.4	21 - 39	P 30.0	0.0	60 - 112	P 86.2	5.9	33
Roche and related	17	67 - 125	P 96.3	1.6	33 - 62	P 47.6	0.9	101 - 189	P 145.0	2.6	22 - 41	P 31.9	0.7	91 - 170	P 130.5	2.6	25
Siemens and related	18	76 - 141	P 108.4	3.1	36 - 67	P 51.9	1.7	115 - 213	P 163.9	4.3	23 - 43	P 33.1	1.4	104 - 193	P 148.3	4.1	72
Total Population																	
Whole Population	19	66 - 122	P 93.9	17.6	32 - 60	P 45.9	8.3	99 - 185	P 142.1	26.1	22 - 41	P 31.7	4.6	90 - 167	P 128.1	23.8	214
Bilirubin, Direct Comprehensive																	
Initial Grouping by Reagent and Instrument																	
Abbott acid diazo & Abbott Architect c, ci, i	1	0.6 - 1.4	C 1.03	0.12	0.2 - 1.0	C 0.62	0.1	1.0 - 1.8	C 1.41	0.15	0 - 0.9	C 0.45	0.07	1.0 - 1.8	C 1.35	0.17	15
Beckman Coulter & Beck Coult Unicel DXC	2	0.2 - 1.0	C 0.59	0.08	0 - 0.8	C 0.37	0.05	0.4 - 1.2	C 0.84	0.06	0 - 0.7	C 0.28	0.04	0.4 - 1.2	C 0.79	0.09	12
Beckman Olympus & Beck Olym AU 400/600/5400	3	0.4 - 1.2	C 0.83	0.12	0.1 - 0.9	C 0.48	0.07	0.7 - 1.5	C 1.13	0.17	0 - 0.8	C 0.37	0.07	0.7 - 1.5	C 1.1	0.18	15
Beckman Olympus & Beckman AU 480	4	0.5 - 1.3	C 0.86	0.1	0.1 - 0.9	C 0.51	0.05	0.8 - 1.6	C 1.21	0.11	0 - 0.8	C 0.4	0.04	0.7 - 1.5	C 1.13	0.1	12
Ortho Vitros & Ortho Vitros 3600, 5600	5	0 - 0.6	C 0.21	0.34	0 - 0.5	C 0.12	0.23	0 - 0.8	C 0.44	0.44	0 - 0.5	C 0.1	0.19	0 - 0.8	C 0.39	0.41	14
Siemens Dimension DBI & Siemens Dimension EXL	6	0.2 - 1.0	C 0.59	0.08	0 - 0.7	C 0.31	0.05	0.4 - 1.2	C 0.81	0.1	0 - 0.6	C 0.22	0.05	0.4 - 1.2	C 0.78	0.1	44
Initial Grouping by Reagent																	
Abbott acid diazo	7	0.6 - 1.4	C 1.03	0.12	0.2 - 1.0	C 0.62	0.1	1.0 - 1.8	C 1.41	0.15	0 - 0.9	C 0.45	0.07	1.0 - 1.8	C 1.35	0.17	15
Beckman Coulter	8	0.3 - 1.1	C 0.66	0.13	0 - 0.8	C 0.4	0.07	0.5 - 1.3	C 0.93	0.15	0 - 0.7	C 0.31	0.06	0.5 - 1.3	C 0.89	0.18	18
Beckman Olympus	9	0.4 - 1.2	C 0.84	0.11	0.1 - 0.9	C 0.49	0.07	0.8 - 1.6	C 1.16	0.15	0 - 0.8	C 0.39	0.06	0.7 - 1.5	C 1.11	0.15	28
Ortho Vitros	10	0 - 0.6	C 0.24	0.36	0 - 0.5	C 0.12	0.23	0.1 - 0.9	C 0.49	0.46	0 - 0.5	C 0.1	0.2	0 - 0.9	C 0.45	0.44	25
Roche acid diazo	11	0.1 - 0.9	C 0.52	0.06	0 - 0.7	C 0.29	0.03	0.4 - 1.2	C 0.77	0.08	0 - 0.6	C 0.21	0.03	0.3 - 1.1	C 0.72	0.09	14

Siemens Dimension DBI	12	0.2 - 1.0	C 0.58	0.08	0 - 0.7	C 0.31	0.05	0.4 - 1.2	C 0.82	0.1	0 - 0.6	C 0.22	0.04	0.4 - 1.2	C 0.78	0.09	56
Initial Grouping bySensitivityor Principle																	
Acid diazo methods	13	0.2 - 1.0	C 0.61	0.3	0 - 0.7	C 0.34	0.19	0.5 - 1.3	C 0.88	0.38	0 - 0.7	C 0.25	0.15	0.4 - 1.2	C 0.83	0.36	146
Diazonium ion methods	14	0.4 - 1.2	C 0.81	0.14	0.1 - 0.9	C 0.47	0.08	0.7 - 1.5	C 1.14	0.17	0 - 0.8	C 0.36	0.08	0.7 - 1.5	C 1.08	0.17	34
Other	15	0.2 - 1.0	C 0.56	0.2	0 - 0.7	C 0.33	0.14	0.4 - 1.2	C 0.78	0.27	0 - 0.7	C 0.25	0.13	0.3 - 1.1	C 0.67	0.27	13
Total Population																	
Whole Population	16	0.3 - 1.1	C 0.65	0.29	0 - 0.8	C 0.36	0.18	0.5 - 1.3	C 0.93	0.36	0 - 0.7	C 0.27	0.15	0.5 - 1.3	C 0.88	0.35	198

Cortisol

Initial Grouping byReagent																	
Beckman Coulter Access	1	15 - 25	P 19.7	1.4	8 - 14	P 10.8	0.8	20 - 34	P 27.1	2.5	6 - 10	P 7.9	0.7	19 - 32	P 25.3	2.2	15
Roche Elecsys	2	14 - 23	P 18.6	1.0	7 - 12	P 9.8	0.5	21 - 34	P 27.6	1.9	5 - 9	P 7.0	0.0	19 - 31	P 24.9	1.5	16
Initial Grouping bySensitivityor Principle																	
Immuno-not FPIA	3	14 - 24	P 19.0	2.3	8 - 13	P 10.7	1.1	20 - 33	P 26.5	2.5	6 - 10	P 7.6	1.0	18 - 31	P 24.5	2.6	11
Luminometric	4	14 - 24	P 19.2	1.6	8 - 13	P 10.3	1.0	20 - 34	P 26.9	2.6	6 - 9	P 7.5	0.7	19 - 31	P 24.8	2.4	42
Total Population																	
Whole Population	5	14 - 24	P 19.1	1.8	8 - 13	P 10.4	1.0	20 - 34	P 26.9	2.7	6 - 9	P 7.5	0.7	19 - 31	P 24.8	2.5	57

Creatine Kinase, Total

Initial Grouping byReagent and Instrument																	
Abbott & Abbott Architect c, ci, i	1	131 - 243	P 187.2	5.4	63 - 117	P 90.2	2.3	197 - 365	P 280.8	10.3	39 - 73	P 56.4	2.2	179 - 333	P 256.3	9.0	13
Beckman Coulter & Beck Coulter UniceL DXC	2	134 - 249	P 191.7	4.7	66 - 122	P 94.1	2.1	197 - 367	P 282.0	7.7	41 - 77	P 59.0	1.5	182 - 337	P 259.4	8.4	11
Beckman Olympus & Beck Olym AU 400/600/5400	3	116 - 215	P 165.3	13.6	56 - 104	P 79.9	5.2	174 - 322	P 248.0	18.5	35 - 66	P 50.4	3.6	160 - 297	P 228.5	16.0	21
Beckman Olympus & Beckman AU 480	4	118 - 219	P 168.1	8.6	56 - 104	P 80.3	4.3	175 - 325	P 249.9	14.3	35 - 66	P 50.4	2.2	161 - 299	P 230.0	12.7	11
Ortho Vitros & Ortho Vitros 3600, 5600	5	102 - 189	P 145.0	7.1	55 - 102	P 78.1	4.4	134 - 248	P 191.1	8.9	35 - 66	P 50.7	2.4	128 - 238	P 182.7	7.5	15
Ortho Vitros & Ortho Vitros not DT or ECI	6	102 - 189	P 145.6	7.3	53 - 98	P 75.1	4.9	135 - 250	P 192.5	11.0	34 - 63	P 48.5	4.8	128 - 239	P 183.5	9.6	11
Roche Cobas & Roche e/c, 1XX, X000, Elec series	7	130 - 241	P 185.6	3.7	62 - 115	P 88.7	1.8	192 - 356	P 274.0	7.1	39 - 73	P 56.3	1.7	176 - 327	P 251.4	6.3	10
Siemens Dimension & Siemens Dimension EXL	8	127 - 235	P 181.0	4.9	60 - 112	P 86.3	2.9	186 - 345	P 265.1	10.1	38 - 70	P 54.0	2.2	172 - 320	P 246.4	6.7	21
Siemens Dimension IFCC & Siemens Dimension EXL 9	9	126 - 235	P 180.6	4.8	61 - 112	P 86.5	2.2	188 - 349	P 268.6	8.3	38 - 71	P 54.4	1.8	172 - 320	P 245.9	6.7	35
Initial Grouping byReagent																	
Abbott	10	131 - 243	P 187.2	5.4	63 - 117	P 90.2	2.3	197 - 365	P 280.8	10.3	39 - 73	P 56.4	2.2	179 - 333	P 256.3	9.0	13
Beckman Coulter	11	131 - 244	P 187.4	9.6	64 - 119	P 91.4	5.5	193 - 359	P 275.9	14.3	40 - 75	P 57.4	3.5	178 - 331	P 254.4	12.6	14
Beckman Olympus	12	116 - 216	P 166.4	11.8	56 - 104	P 80.0	4.8	174 - 323	P 248.6	16.7	35 - 66	P 50.5	3.1	160 - 298	P 229.0	14.6	34
Ortho Vitros	13	102 - 189	P 145.7	7.1	54 - 100	P 76.9	4.8	134 - 250	P 192.0	9.7	35 - 65	P 49.7	3.7	128 - 238	P 183.4	8.4	29
Roche Cobas	14	129 - 239	P 183.7	4.5	62 - 115	P 88.8	2.1	190 - 353	P 271.5	7.7	39 - 73	P 56.1	1.5	175 - 324	P 249.5	6.1	24
Siemens Dimension	15	126 - 235	P 180.7	6.1	61 - 113	P 86.6	3.1	186 - 345	P 265.1	11.1	38 - 71	P 54.6	2.6	172 - 319	P 245.7	8.5	29
Siemens Dimension IFCC	16	127 - 235	P 180.8	4.4	61 - 112	P 86.5	2.1	188 - 348	P 268.0	7.7	38 - 71	P 54.4	1.8	172 - 319	P 245.7	6.3	45
Initial Grouping bySensitivityor Principle																	
IFCC standardized methods	17	124 - 230	P 177.2	13.6	60 - 111	P 85.4	6.5	184 - 342	P 262.8	19.5	38 - 70	P 53.8	4.9	169 - 313	P 240.9	19.0	194
Vitros and related	18	102 - 189	P 145.7	7.1	54 - 100	P 76.9	4.8	134 - 250	P 192.0	9.7	35 - 65	P 49.7	3.7	128 - 238	P 183.4	8.4	29
Total Population																	
Whole Population	19	121 - 225	P 173.2	16.6	59 - 110	P 84.3	6.9	178 - 330	P 253.7	30.0	37 - 69	P 53.2	4.9	163 - 304	P 233.5	26.2	227

Gamma-Glutamyltransferase (GGT)

Initial Grouping byReagent and Instrument																	
Beckman Olympus & Beck Olym AU 400/600/5400	1	46 - 69	P 57.9	3.6	16 - 36	C 26.4	1.7	71 - 107	P 88.8	5.4	6 - 26	C 15.9	1.0	64 - 96	P 80.1	5.0	18
Beckman Olympus & Beckman AU 480	2	47 - 70	P 58.6	1.3	16 - 36	C 26.3	0.5	72 - 107	P 89.4	2.1	6 - 26	C 16.0	0.6	64 - 97	P 80.6	1.7	10
Siemens Dimension & Siemens Dimension EXL	3	71 - 107	P 88.9	2.8	34 - 54	C 44.2	2.0	106 - 159	P 132.2	3.3	19 - 39	C 28.9	1.8	96 - 144	P 120.3	3.5	22
Initial Grouping byReagent																	
Beckman Coulter	4	56 - 83	P 69.4	6.7	22 - 42	C 32.3	3.6	85 - 128	P 106.4	9.6	9 - 29	C 19.1	2.0	76 - 114	P 95.2	8.4	14
Beckman Olympus	5	47 - 70	P 58.3	3.0	17 - 37	C 26.5	1.5	71 - 107	P 89.3	4.5	6 - 26	C 16.1	1.0	64 - 97	P 80.5	4.1	30
Ortho Vitros	6	82 - 123	P 102.8	6.2	39 - 59	C 48.5	3.2	119 - 178	P 148.5	9.3	18 - 38	C 28.3	1.9	109 - 164	P 136.3	8.7	17
Roche Cobas	7	50 - 75	P 62.8	2.4	18 - 38	C 27.9	1.3	77 - 115	P 96.1	3.5	6 - 26	C 16.3	0.9	69 - 103	P 85.8	3.6	19
Siemens Dimension	8	71 - 107	P 89.0	3.3	34 - 54	C 44.0	2.4	106 - 159	P 132.4	3.7	19 - 39	C 28.7	2.2	96 - 144	P 120.1	3.9	29
Initial Grouping bySensitivityor Principle																	
Abbott and Beckman Coulter	9	56 - 84	P 69.6	5.8	22 - 42	C 32.1	3.1	85 - 128	P 106.7	8.3	9 - 29	C 19.2	1.8	77 - 115	P 95.7	7.3	20
Standardized methods	10	48 - 72	P 60.2	7.3	17 - 37	C 27.0	3.3	74 - 112	P 93.1	12.4	6 - 26	C 16.3	2.0	68 - 101	P 84.4	13.0	74
Vitros and related	11	82 - 123	P 102.8	6.2	39 - 59	C 48.5	3.2	119 - 178	P 148.5	9.3	18 - 38	C 28.3	1.9	109 - 164	P 136.3	8.7	17
Siemens and related	12	71 - 107	P 89.0	3.3	34 - 54	C 44.0	2.4	106 - 159	P 132.4	3.7	19 - 39	C 28.7	2.2	96 - 144	P 120.1	3.9	29
Total Population																	
Whole Population	13	58 - 86	P 72.0	17.0	24 - 44	C 33.8	8.9	88 - 132	P 109.6	23.0	11 - 31	C 20.7	5.8	79 - 119	P 99.1	21.6	146

Human Chorionic Gonadotropin (hCG)

Initial Grouping by Reagent and Instrument

Beckman Coulter Access & Beckman Coulter Access	1	751 - 1040	S 895.2	48.2	341 - 436	S 388.4	15.9	811 - 1959	S 1385.0	191.3	191 - 235	S 213.0	7.5	1011 - 1383	S 1196.7	62.0	30
Ortho Vitros ECI & Ortho Vitros 3600, 5600	2	799 - 1055	S 926.9	42.6	343 - 448	S 395.1	17.5	1216 - 1622	S 1419.1	67.5	188 - 245	S 216.6	9.4	1087 - 1456	S 1271.4	61.4	12
Roche Elecsys & Roche e411/e601/E170/E2010	3	607 - 1084	S 845.4	79.4	256 - 472	S 364.2	36.0	919 - 1673	S 1295.9	125.7	134 - 260	S 197.2	21.0	804 - 1540	S 1171.8	122.7	18
Roche HCG Stat & Roche e411/e601/E170/E2010	4	620 - 746	S 682.9	20.9	263 - 309	S 285.9	7.8	962 - 1190	S 1076.0	38.1	142 - 169	S 155.6	4.6	868 - 1064	S 965.6	32.7	10
Roche HCG+b & Roche e411/e601/E170/E2010	5	680 - 1030	S 854.9	58.3	291 - 441	S 365.8	25.0	1051 - 1594	S 1322.4	90.4	156 - 245	S 200.3	14.9	923 - 1458	S 1190.5	89.2	16
Siemens Advia & Siemens Centaur/Centaur CP	6	576 - 722	S 649.2	24.3	295 - 340	S 317.3	7.5	566 - 1298	S 931.9	122.1	162 - 193	S 177.6	5.0	579 - 1067	S 823.2	81.4	13
Siemens Dimension & Siemens Dimension EXL	7	751 - 902	S 826.1	25.2	332 - 392	S 362.4	10.0	969 - 1639	S 1304.0	111.8	177 - 222	S 199.8	7.5	938 - 1391	S 1164.5	75.5	26
Siemens Dimension LOCI & Siemens Dimension EXL	8	749 - 875	S 811.8	21.0	320 - 383	S 351.4	10.5	1139 - 1518	S 1328.5	63.2	178 - 212	S 194.9	5.8	892 - 1414	S 1153.1	86.9	12
Siemens Immulite & Siemens Immulite 1000	9	1005 - 1775	S 1390.0	128.3	480 - 742	S 611.1	43.6	1517 - 2743	S 2130.0	204.2	270 - 409	S 339.5	23.3	1413 - 2456	S 1934.3	173.8	24
Tosoh Total b-hCG & Tosoh AIA ST	10	959 - 1230	S 1094.4	45.2	392 - 543	S 467.6	25.0	1493 - 1900	S 1696.7	67.8	211 - 265	S 237.8	9.1	1351 - 1762	S 1556.6	68.5	11
Tosoh beta-hCG & Tosoh AIA	11	889 - 1252	S 1070.8	60.5	331 - 571	S 451.1	39.9	1445 - 1951	S 1698.2	84.2	201 - 281	S 240.9	13.2	1262 - 1750	S 1506.3	81.3	14
Tosoh beta-hCG & Tosoh AIA ST	12	752 - 1355	S 1053.3	100.4	341 - 557	S 448.8	36.0	1095 - 2112	S 1603.7	169.5	210 - 274	S 242.0	10.8	396 - 2354	S 1374.9	326.3	13

Initial Grouping by Reagent

Beckman Coulter Access	13	756 - 1035	S 895.3	46.5	338 - 435	S 386.6	16.2	850 - 1891	S 1370.6	173.5	188 - 238	S 213.3	8.3	1009 - 1393	S 1201.0	64.0	38
Ortho Vitros ECI	14	804 - 1044	S 924.4	40.0	340 - 456	S 398.3	19.3	1210 - 1649	S 1429.7	73.1	187 - 249	S 218.0	10.3	1077 - 1487	S 1281.9	68.3	14
Roche Elecsys	15	639 - 1060	S 849.6	70.2	269 - 460	S 364.5	31.7	979 - 1642	S 1310.7	110.4	143 - 250	S 196.2	17.9	858 - 1506	S 1182.1	108.0	26
Roche HCG Stat	16	619 - 753	S 686.1	22.3	264 - 309	S 286.4	7.5	964 - 1196	S 1080.2	38.6	142 - 169	S 155.6	4.4	868 - 1072	S 970.0	34.1	11
Roche HCG+b	17	687 - 1009	S 848.1	53.7	289 - 432	S 360.4	23.8	1066 - 1565	S 1315.6	83.1	157 - 238	S 197.6	13.5	938 - 1432	S 1185.0	82.3	25
Siemens Advia	18	576 - 722	S 649.2	24.3	295 - 340	S 317.3	7.5	566 - 1298	S 931.9	122.1	162 - 193	S 177.6	5.0	579 - 1067	S 823.2	81.4	13
Siemens Dimension	19	740 - 918	S 828.9	29.7	329 - 392	S 360.9	10.5	988 - 1631	S 1309.6	107.2	178 - 221	S 199.7	7.1	921 - 1428	S 1174.3	84.4	29
Siemens Dimension LOCI	20	709 - 932	S 820.8	37.2	311 - 398	S 354.4	14.4	1134 - 1513	S 1323.5	63.1	174 - 219	S 196.4	7.5	904 - 1407	S 1155.2	83.8	13
Siemens Immulite	21	1021 - 1761	S 1390.8	123.3	481 - 739	S 610.2	43.0	1541 - 2715	S 2127.8	195.7	263 - 411	S 337.1	24.7	1331 - 2486	S 1908.5	192.6	26
Tosoh Total b-hCG	22	472 - 1615	S 1043.3	190.5	373 - 556	S 464.5	30.5	544 - 2657	S 1600.3	352.3	207 - 266	S 236.5	10.0	524 - 2414	S 1469.0	315.0	13
Tosoh beta-hCG	23	815 - 1310	S 1062.4	82.6	336 - 564	S 450.0	38.1	1232 - 2074	S 1652.8	140.4	205 - 278	S 241.4	12.1	715 - 2171	S 1443.2	242.6	27

Initial Grouping by Sensitivity or Principle

IFCC standardized	24	509 - 1205	S 856.8	116.1	231 - 510	S 370.4	46.4	703 - 1949	S 1325.9	207.8	131 - 274	S 202.5	23.9	619 - 1737	S 1178.0	186.3	199
Total Beta methods	25	406 - 1608	S 1006.9	200.4	283 - 610	S 446.4	54.5	456 - 2625	S 1540.7	361.4	151 - 304	S 227.3	25.5	442 - 2388	S 1414.9	324.3	15
Vitros and related	26	804 - 1044	S 924.4	40.0	340 - 456	S 398.3	19.3	1210 - 1649	S 1429.7	73.1	187 - 249	S 218.0	10.3	1077 - 1487	S 1281.9	68.3	14
Siemens Immulite and related	27	1034 - 1774	S 1403.6	123.3	489 - 743	S 615.7	42.3	1567 - 2683	S 2124.8	186.0	255 - 424	S 339.7	28.1	1312 - 2497	S 1904.6	197.4	31

Total Population

Whole Population	28	301 - 1563	S 932.0	210.4	135 - 674	S 404.4	89.7	455 - 2410	S 1432.3	325.8	72 - 370	S 220.9	49.6	385 - 2173	S 1278.6	298.0	262
------------------	----	------------	---------	-------	-----------	---------	------	------------	----------	-------	----------	---------	------	------------	----------	-------	-----

Iron

Initial Grouping by Reagent and Instrument

Abbott Architect & Abbott Architect c, ci, i	1	110 - 165	P 137.8	4.9	60 - 90	P 75.4	6.0	159 - 239	P 198.8	4.6	43 - 64	P 53.3	3.2	145 - 217	P 181.0	4.7	11
Beck Oly tripyridyltriazine & Beck Olym AU 400/600/5400	2	113 - 169	P 140.9	3.9	60 - 90	P 75.3	3.0	166 - 249	P 207.5	4.9	42 - 63	P 52.8	3.3	150 - 225	P 187.1	6.4	10
Ortho Vitros & Ortho Vitros 3600, 5600	3	114 - 171	P 142.3	5.5	55 - 83	P 68.9	4.7	174 - 260	P 216.9	10.1	38 - 56	P 46.9	3.9	155 - 233	P 193.8	7.1	14
Roche Cobas & Roche Cobas 6000	4	111 - 166	P 138.3	7.4	61 - 92	P 76.7	6.3	159 - 238	P 198.6	8.8	44 - 66	P 55.0	2.4	145 - 218	P 181.4	6.5	11
Siemens Dimension & Siemens Dimension EXL	5	103 - 155	P 129.1	2.6	56 - 84	P 70.1	1.7	150 - 225	P 187.3	2.8	40 - 61	P 50.5	1.4	136 - 204	P 170.4	2.5	32

Initial Grouping by Reagent

Abbott Architect	6	110 - 165	P 137.8	4.9	60 - 90	P 75.4	6.0	159 - 239	P 198.8	4.6	43 - 64	P 53.3	3.2	145 - 217	P 181.0	4.7	11
Beck Oly tripyridyltriazine	7	114 - 171	P 142.5	4.1	61 - 91	P 75.9	2.7	167 - 251	P 209.2	5.0	43 - 64	P 53.7	3.1	152 - 228	P 189.6	6.1	18
Beckman Coulter	8	111 - 167	P 139.0	8.8	59 - 89	P 73.9	4.3	162 - 243	P 202.7	11.9	42 - 63	P 52.7	3.8	148 - 222	P 184.7	10.5	22
Beckman Olympus Ferene	9	113 - 170	P 141.8	5.8	61 - 92	P 76.6	4.2	166 - 248	P 207.0	7.5	44 - 66	P 55.1	3.0	150 - 225	P 187.3	7.3	14
Carolina	10	101 - 151	P 126.0	5.4	56 - 84	P 69.6	6.1	143 - 214	P 178.5	8.1	40 - 60	P 50.1	3.1	131 - 196	P 163.7	7.6	11
Ortho Vitros	11	113 - 170	P 141.6	6.8	54 - 81	P 67.8	5.1	172 - 258	P 215.4	9.3	36 - 54	P 45.2	4.1	156 - 234	P 194.7	8.9	26
Roche Cobas	12	109 - 164	P 136.8	5.6	61 - 91	P 75.7	4.8	158 - 237	P 197.3	6.6	44 - 66	P 54.9	2.5	144 - 216	P 180.1	5.1	24
Siemens Dimension	13	103 - 155	P 129.0	2.4	56 - 84	P 70.0	1.7	150 - 225	P 187.2	2.8	40 - 60	P 50.4	1.7	136 - 204	P 170.4	2.6	44

Initial Grouping by Sensitivity or Principle

Ferene-based	14	105 - 158	P 131.8	7.2	57 - 86	P 71.7	4.9	153 - 229	P 190.8	11.0	41 - 62	P 51.5	3.2	139 - 208	P 173.5	9.7	84
Ferrozine-based	15	107 - 160	P 133.3	9.9	58 - 87	P 72.9	5.9	155 - 233	P 193.8	13.3	42 - 63	P 52.2	4.3	141 - 212	P 176.8	12.1	70
Tripyridyltriazine (TPTZ)	16	114 - 171	P 142.5	4.1	61 - 91	P 75.9	2.7	167 - 251	P 209.2	5.0	43 - 64	P 53.7	3.1	152 - 228	P 189.6	6.1	18
All other methods	17	113 - 170	P 141.6	6.8	54 - 81	P 67.8	5.1	172 - 258	P 215.4	9.3	36 - 54	P 45.2	4.1	156 - 234	P 194.7	8.9	26

Total Population

Whole Population	18	108 - 162	P 134.6	9.0	58 - 86	P 72.0	5.6	157 - 236	P 196.7	14.3	41 - 61	P 51.2	4.4	143 - 215	P 179.0	12.8	200
------------------	----	-----------	---------	-----	---------	--------	-----	-----------	---------	------	---------	--------	-----	-----------	---------	------	-----

Lactic Acid

Initial Grouping by Reagent and Instrument

Ortho Vitros & Ortho Vitros 3600, 5600	1	2.5 - 4.2	P 3.34	0.09	1.0 - 1.6	P 1.27	0.06	4.0 - 6.6	P 5.3	0.13	0.4 - 1.0	C 0.68	0.06	3.6 - 6.0	P 4.77	0.19	10
Siemens Dimension & Siemens Dimension EXL	2	2.8 - 4.7	P 3.74	0.14	1.2 - 1.9	P 1.56	0.1	4.5 - 7.4	P 5.94	0.22	0.5 - 1.1	C 0.82	0.1	4.0 - 6.6	P 5.31	0.16	40
Initial Grouping by Reagent																	
Ortho Vitros	3	2.5 - 4.2	P 3.34	0.08	1.0 - 1.6	P 1.28	0.06	4.0 - 6.7	P 5.34	0.13	0.4 - 1.0	C 0.69	0.06	3.6 - 6.0	P 4.81	0.18	14
Siemens Dimension	4	2.8 - 4.7	P 3.72	0.16	1.2 - 1.9	P 1.54	0.12	4.4 - 7.4	P 5.92	0.24	0.5 - 1.1	C 0.81	0.12	4.0 - 6.6	P 5.28	0.18	48
Initial Grouping by Sensitivity or Principle																	
luminometric	5	2.7 - 4.5	P 3.64	0.22	1.1 - 1.9	P 1.48	0.15	4.3 - 7.2	P 5.79	0.33	0.5 - 1.1	C 0.78	0.12	3.9 - 6.5	P 5.17	0.27	62
Total Population																	
Whole Population	6	2.7 - 4.5	P 3.62	0.22	1.1 - 1.8	P 1.48	0.15	4.3 - 7.2	P 5.75	0.35	0.5 - 1.1	C 0.78	0.11	3.8 - 6.4	P 5.13	0.29	86

Lactate Dehydrogenase, Total (LDH)**Initial Grouping by Reagent and Instrument**

Beckman Coulter & Beck Coulter Unicel DXC	1	305 - 458	P 381.8	11.7	185 - 277	P 231.0	6.4	418 - 628	P 523.1	15.4	145 - 218	P 181.7	5.8	387 - 581	P 484.0	10.5	10
Beckman Olympus & Beck Olym AU 400/600/5400	2	305 - 458	P 381.4	20.5	181 - 272	P 226.7	12.0	426 - 639	P 532.6	25.4	141 - 211	P 175.9	9.4	390 - 585	P 487.5	24.4	14
Ortho Vitros & Ortho Vitros not DT or ECi	3	1137 - 1705	P 1421.0	32.3	688 - 1032	P 859.7	18.9	1635 - 2452	P 2043.5	47.3	544 - 816	P 680.4	10.7	1463 - 2195	P 1829.3	127.4	12
Siemens Flex LDI & Siemens Dimension EXL	4	365 - 548	P 456.6	14.3	217 - 326	P 271.5	9.5	510 - 765	P 637.6	17.9	170 - 255	P 212.2	7.0	469 - 704	P 586.8	19.7	26
Initial Grouping by Reagent																	
Beckman Coulter	5	306 - 458	P 381.9	10.9	184 - 276	P 230.3	5.9	421 - 632	P 526.5	15.2	144 - 216	P 180.3	5.6	389 - 583	P 485.9	11.6	16
Beckman Olympus	6	311 - 466	P 388.3	20.7	185 - 277	P 231.0	11.9	433 - 650	P 541.8	27.6	144 - 216	P 179.9	10.1	398 - 596	P 497.0	25.9	25
Ortho Vitros	7	1060 - 1590	P 1324.6	248.7	644 - 966	P 805.3	151.8	1491 - 2237	P 1863.9	366.3	509 - 764	P 636.7	120.8	1355 - 2033	P 1693.9	334.4	22
Roche Cobas	8	383 - 575	P 479.2	9.1	229 - 344	P 286.8	5.9	529 - 794	P 661.8	13.2	179 - 268	P 223.6	5.5	486 - 730	P 608.1	14.5	17
Siemens Dimension	9	364 - 546	P 455.0	17.3	218 - 327	P 272.7	11.5	506 - 759	P 632.2	20.8	169 - 253	P 211.1	7.5	454 - 680	P 567.0	86.5	15
Siemens Flex LDI	10	367 - 550	P 458.5	14.4	218 - 327	P 272.2	9.1	511 - 766	P 638.7	17.2	170 - 255	P 212.6	6.6	471 - 707	P 589.0	19.5	31
Initial Grouping by Sensitivity or Principle																	
IFCC Standardized	11	364 - 546	P 455.2	85.0	218 - 327	P 272.5	51.2	506 - 759	P 632.2	117.8	164 - 246	P 204.7	54.9	465 - 698	P 581.4	110.2	30
Other no cofactor	12	295 - 443	P 369.0	37.9	179 - 269	P 224.0	22.6	404 - 606	P 505.3	51.4	140 - 210	P 174.6	18.1	375 - 563	P 468.8	44.7	16
Siemens and related	13	339 - 509	P 424.0	39.3	202 - 303	P 252.9	23.0	471 - 706	P 588.5	54.7	158 - 236	P 197.0	17.8	432 - 648	P 540.1	60.5	88
Vitros and related	14	1060 - 1590	P 1324.6	248.7	644 - 966	P 805.3	151.8	1491 - 2237	P 1863.9	366.3	509 - 764	P 636.7	120.8	1355 - 2033	P 1693.9	334.4	22
Total Population																	
Whole Population	15	440 - 660	P 549.8	320.1	265 - 397	P 330.7	195.9	614 - 921	P 767.9	457.9	206 - 309	P 257.8	157.3	562 - 843	P 702.4	414.4	165

Lipase**Initial Grouping by Reagent and Instrument**

Beckman Olympus & Beck Olym AU 400/600/5400	1	30 - 56	P 43.0	3.3	18 - 33	P 25.0	1.8	42 - 78	P 59.9	4.7	15 - 27	P 21.0	5.7	38 - 71	P 54.9	3.8	14
Beckman Olympus & Beckman AU 480	2	29 - 54	P 41.4	2.8	17 - 32	P 24.5	1.7	40 - 75	P 57.4	3.8	16 - 30	P 22.7	8.6	37 - 69	P 53.2	3.3	14
Ortho Vitros & Ortho Vitros 3600, 5600	3	306 - 568	P 437.1	11.1	191 - 355	P 272.9	6.5	410 - 762	P 586.1	12.5	150 - 278	P 214.1	5.2	381 - 707	P 544.0	14.0	15
Ortho Vitros & Ortho Vitros not DT or ECi	4	305 - 567	P 436.1	10.8	188 - 350	P 269.2	7.3	409 - 759	P 583.6	15.7	147 - 274	P 210.6	4.9	383 - 711	P 546.6	15.5	10
Siemens Dimension & Siemens Dimension EXL	5	105 - 194	P 149.3	5.6	66 - 123	P 94.7	4.1	140 - 261	P 200.5	6.3	54 - 100	P 76.9	3.4	131 - 243	P 187.2	6.6	10
Siemens LIPL, liquid & Siemens Dimension EXL	6	105 - 196	P 150.4	4.3	67 - 125	P 95.8	3.3	142 - 265	P 203.5	4.9	54 - 101	P 77.8	2.9	133 - 246	P 189.6	4.5	37
Initial Grouping by Reagent																	
Beckman Olympus	7	30 - 55	P 42.2	3.1	17 - 32	P 24.7	1.8	41 - 76	P 58.6	4.5	15 - 28	P 21.9	7.3	38 - 70	P 54.0	3.6	28
Ortho Vitros	8	305 - 567	P 435.9	11.4	189 - 352	P 270.6	8.1	409 - 759	P 583.7	14.8	149 - 276	P 212.5	6.6	381 - 707	P 544.1	14.6	28
Roche Cobas Integra	9	27 - 50	P 38.6	3.3	17 - 32	P 24.4	2.1	36 - 67	P 51.6	4.2	14 - 26	P 19.7	1.7	33 - 62	P 47.5	3.7	15
Siemens Dimension	10	103 - 192	P 147.6	8.6	66 - 122	P 93.7	6.0	139 - 258	P 198.8	11.4	54 - 100	P 76.9	3.2	131 - 243	P 187.1	7.3	15
Siemens LIPL, liquid	11	105 - 195	P 149.7	6.6	67 - 124	P 95.5	4.6	142 - 264	P 203.0	9.3	54 - 101	P 77.5	3.3	133 - 246	P 189.4	7.8	44
Initial Grouping by Sensitivity or Principle																	
Enzymatic/colorimetric	12	126 - 233	P 179.4	142.8	79 - 147	P 112.8	88.9	169 - 314	P 241.8	190.5	63 - 117	P 90.0	69.3	159 - 295	P 227.2	178.3	130
Colorimetric	13	26 - 48	P 37.0	5.1	17 - 31	P 24.1	3.2	34 - 64	P 49.2	7.8	14 - 25	P 19.4	2.6	32 - 59	P 45.7	6.9	40
Total Population																	
Whole Population	14	98 - 182	P 140.3	135.8	62 - 115	P 88.5	84.4	132 - 245	P 188.4	182.0	50 - 92	P 70.9	66.1	123 - 229	P 176.3	170.4	182

Magnesium mg/dL**Initial Grouping by Reagent and Instrument**

Abbott & Abbott Architect c, ci, i	1	2.2 - 3.6	P 2.88	0.09	1.3 - 2.2	P 1.79	0.08	2.9 - 4.8	P 3.82	0.11	1.1 - 1.8	P 1.42	0.09	2.7 - 4.4	P 3.54	0.22	13
Beckman Coulter & Beck Coulter Unicel DXC	2	2.2 - 3.7	P 2.92	0.1	1.4 - 2.4	P 1.92	0.05	2.9 - 4.9	P 3.92	0.08	1.2 - 2.0	P 1.58	0.08	2.7 - 4.5	P 3.61	0.11	13
Beckman Olympus & Beck Olym AU 400/600/5400	3	2.3 - 3.8	P 3.03	0.11	1.4 - 2.4	P 1.92	0.11	3.0 - 5.0	P 4.02	0.12	1.2 - 2.0	P 1.62	0.06	2.8 - 4.7	P 3.73	0.12	18
Beckman Olympus & Beckman AU 480	4	2.3 - 3.8	P 3.02	0.1	1.5 - 2.5	P 1.98	0.08	3.0 - 5.0	P 4.01	0.11	1.2 - 2.1	P 1.65	0.05	2.8 - 4.7	P 3.74	0.14	13
Ortho Vitros & Ortho Vitros 3600, 5600	5	2.4 - 4.0	P 3.2	0.09	1.6 - 2.6	P 2.09	0.07	3.2 - 5.3	P 4.26	0.12	1.3 - 2.2	P 1.73	0.04	3.0 - 5.0	P 3.98	0.1	16
Ortho Vitros & Ortho Vitros not DT or ECi	6	2.4 - 4.0	P 3.22	0.09	1.6 - 2.6	P 2.08	0.06	3.2 - 5.3	P 4.28	0.12	1.3 - 2.2	P 1.73	0.05	3.0 - 5.0	P 4.01	0.09	19
Roche Cobas & Roche Cobas 6000	7	2.3 - 3.8	P 3.06	0.05	1.5 - 2.5	P 2.0	0.04	3.0 - 5.1	P 4.06	0.08	1.3 - 2.1	P 1.68	0.04	2.8 - 4.7	P 3.77	0.06	11

Roche Cobas & Roche e/c, 1XX, X000, Elec series	8	2.3 - 3.8	P 3.02	0.08	1.5 - 2.5	P 1.99	0.05	3.1 - 5.1	P 4.08	0.11	1.2 - 2.1	P 1.66	0.05	2.8 - 4.7	P 3.78	0.1	13
Siemens Dimension & Siemens Dimension EXL	9	2.3 - 3.8	P 3.03	0.1	1.5 - 2.4	P 1.95	0.07	3.1 - 5.1	P 4.07	0.11	1.2 - 2.0	P 1.61	0.07	2.8 - 4.7	P 3.79	0.13	53
Siemens Dimension & Siemens Dimension Xpand	10	2.3 - 3.8	P 3.0	0.09	1.5 - 2.5	P 1.97	0.07	3.1 - 5.1	P 4.07	0.07	1.2 - 2.0	P 1.6	0.08	2.8 - 4.7	P 3.78	0.09	13
Initial Grouping by Reagent																	
Abbott	11	2.2 - 3.6	P 2.88	0.09	1.3 - 2.2	P 1.79	0.08	2.9 - 4.8	P 3.82	0.11	1.1 - 1.8	P 1.42	0.09	2.7 - 4.4	P 3.54	0.22	13
Beckman Coulter	12	2.2 - 3.7	P 2.98	0.12	1.5 - 2.4	P 1.95	0.08	3.0 - 5.0	P 3.99	0.13	1.2 - 2.0	P 1.62	0.08	2.8 - 4.6	P 3.68	0.15	23
Beckman Olympus	13	2.3 - 3.8	P 3.02	0.11	1.5 - 2.4	P 1.95	0.1	3.0 - 5.0	P 4.0	0.12	1.2 - 2.0	P 1.62	0.08	2.8 - 4.7	P 3.72	0.13	34
Carolina	14	2.0 - 3.3	P 2.64	0.11	1.3 - 2.2	P 1.76	0.1	2.6 - 4.3	P 3.44	0.15	1.1 - 1.9	P 1.53	0.12	2.3 - 3.9	P 3.12	0.19	10
Ortho Vitros	15	2.4 - 4.0	P 3.21	0.09	1.6 - 2.6	P 2.08	0.06	3.2 - 5.3	P 4.27	0.12	1.3 - 2.2	P 1.73	0.05	3.0 - 5.0	P 3.98	0.1	39
Roche Cobas	16	2.3 - 3.8	P 3.03	0.07	1.5 - 2.5	P 1.99	0.05	3.0 - 5.1	P 4.06	0.1	1.3 - 2.1	P 1.67	0.05	2.8 - 4.7	P 3.76	0.09	28
Siemens Dimension	17	2.3 - 3.8	P 3.03	0.1	1.5 - 2.4	P 1.95	0.07	3.1 - 5.1	P 4.07	0.11	1.2 - 2.0	P 1.6	0.07	2.8 - 4.7	P 3.79	0.12	73
Initial Grouping by Sensitivity or Principle																	
Calmagite-based	18	2.3 - 3.8	P 3.01	0.16	1.5 - 2.5	P 1.97	0.11	3.0 - 4.9	P 3.94	0.22	1.2 - 2.1	P 1.65	0.13	2.7 - 4.6	P 3.66	0.19	31
Arsenazo	19	2.1 - 3.5	P 2.79	0.16	1.3 - 2.2	P 1.78	0.09	2.8 - 4.6	P 3.68	0.22	1.1 - 1.8	P 1.47	0.12	2.5 - 4.2	P 3.35	0.29	23
Magon (Xylidyl Blue)-based	20	2.3 - 3.8	P 3.02	0.16	1.5 - 2.4	P 1.96	0.12	3.0 - 5.0	P 4.0	0.14	1.2 - 2.1	P 1.65	0.14	2.8 - 4.7	P 3.75	0.28	54
All other methods	21	2.3 - 3.9	P 3.13	0.12	1.5 - 2.6	P 2.04	0.07	3.1 - 5.2	P 4.18	0.15	1.3 - 2.1	P 1.7	0.06	2.9 - 4.9	P 3.89	0.14	67
MTB (methylthymol blue)	22	2.3 - 3.8	P 3.03	0.1	1.5 - 2.4	P 1.95	0.07	3.1 - 5.1	P 4.07	0.11	1.2 - 2.0	P 1.6	0.07	2.8 - 4.7	P 3.79	0.12	73
Total Population																	
Whole Population	23	2.3 - 3.8	P 3.03	0.16	1.5 - 2.5	P 1.97	0.12	3.0 - 5.1	P 4.04	0.2	1.2 - 2.0	P 1.63	0.12	2.8 - 4.7	P 3.76	0.24	250

Magnesium mEq/L

Total Population																	
Whole Population	1	1.9 - 3.2	P 2.59	0.27	1.3 - 2.2	P 1.73	0.21	2.6 - 4.3	P 3.47	0.23	1.1 - 1.8	P 1.42	0.24	2.4 - 4.0	P 3.18	0.3	12

Thyroid Stimulating Hormone

Initial Grouping by Reagent and Instrument																	
Abbott Cmia & Abbott Architect c, ci, i	1	3.0 - 4.5	S 3.77	0.25	1.4 - 2.1	S 1.73	0.12	4.4 - 6.7	S 5.53	0.39	0.8 - 1.3	S 1.04	0.09	4.1 - 5.9	S 5.03	0.3	23
Beckman Coulter Access & Beckman Coulter Access	2	3.2 - 4.5	S 3.83	0.21	1.4 - 2.1	S 1.77	0.11	4.4 - 7.0	S 5.67	0.43	0.8 - 1.3	S 1.06	0.07	4.2 - 6.2	S 5.18	0.34	71
Beckman Coulter Access & Beckman Coulter Dxl	3	3.3 - 4.4	S 3.86	0.18	1.3 - 2.2	S 1.76	0.15	4.9 - 6.4	S 5.66	0.24	0.8 - 1.3	S 1.04	0.08	4.4 - 5.9	S 5.12	0.25	14
MP Biomedicals & All gamma counters	4	3.6 - 5.9	S 4.76	0.37	1.4 - 3.6	S 2.49	0.35	4.9 - 7.7	S 6.29	0.46	1.0 - 2.4	S 1.7	0.23	4.9 - 6.7	S 5.83	0.31	22
Ortho Vitros & Ortho Vitros 3600, 5600	5	4.6 - 5.8	S 5.19	0.2	2.2 - 2.7	S 2.46	0.08	6.8 - 8.7	S 7.74	0.3	1.3 - 1.6	S 1.46	0.05	6.5 - 7.7	S 7.08	0.19	16
Roche Elecsys & Roche e/c, 1XX, X000, Elec series	6	3.8 - 4.5	S 4.19	0.11	1.8 - 2.4	S 2.08	0.1	5.5 - 6.2	S 5.88	0.12	1.1 - 1.5	S 1.31	0.07	5.1 - 5.7	S 5.43	0.11	14
Roche Elecsys & Roche e411/e601/E170/E2010	7	3.6 - 4.6	S 4.09	0.16	1.8 - 2.3	S 2.05	0.08	5.0 - 6.5	S 5.74	0.24	1.2 - 1.4	S 1.3	0.04	4.6 - 6.0	S 5.3	0.22	28
Siemens Advia & Siemens Centaur/Centaur CP	8	3.5 - 5.2	S 4.32	0.28	1.7 - 2.3	S 1.99	0.11	5.0 - 7.6	S 6.3	0.43	1.0 - 1.4	S 1.19	0.07	4.3 - 7.2	S 5.75	0.48	16
Siemens Dimension & Siemens Dimension Xpand	9	3.1 - 4.7	S 3.93	0.26	1.5 - 2.2	S 1.83	0.12	4.7 - 7.0	S 5.86	0.37	0.9 - 1.3	S 1.08	0.08	4.2 - 6.4	S 5.28	0.36	16
Siemens Dimension LOCI & Siemens Dimension EXL	10	3.1 - 4.1	S 3.64	0.16	1.5 - 2.0	S 1.76	0.09	4.6 - 6.1	S 5.34	0.26	0.9 - 1.3	S 1.08	0.06	4.3 - 5.5	S 4.88	0.2	48
Siemens Immulite 3rd gen & Siemens Immulite 1000	11	3.5 - 5.0	S 4.24	0.24	1.3 - 2.5	S 1.89	0.21	5.0 - 7.6	S 6.28	0.44	0.7 - 1.5	S 1.13	0.13	4.1 - 7.1	S 5.62	0.5	14
Tosoh AIA & Tosoh AIA	12	3.5 - 6.2	S 4.86	0.46	1.7 - 2.9	S 2.28	0.19	5.2 - 8.9	S 7.07	0.61	1.0 - 1.8	S 1.38	0.14	4.8 - 8.2	S 6.51	0.56	34
Tosoh AIA & Tosoh AIA ST	13	4.1 - 5.8	S 4.94	0.27	2.0 - 2.6	S 2.27	0.1	6.1 - 8.1	S 7.11	0.32	1.1 - 1.7	S 1.36	0.1	5.3 - 7.6	S 6.44	0.37	19
Initial Grouping by Reagent																	
Abbott Cmia	14	3.0 - 4.5	S 3.77	0.25	1.4 - 2.1	S 1.73	0.12	4.4 - 6.7	S 5.53	0.39	0.8 - 1.3	S 1.04	0.09	4.1 - 5.9	S 5.03	0.3	23
Beckman Coulter Access	15	3.2 - 4.5	S 3.84	0.21	1.4 - 2.1	S 1.77	0.12	4.5 - 6.9	S 5.68	0.41	0.8 - 1.3	S 1.06	0.07	4.2 - 6.2	S 5.18	0.33	87
MP Biomedicals	16	3.6 - 5.9	S 4.76	0.37	1.4 - 3.6	S 2.49	0.35	4.9 - 7.7	S 6.29	0.46	1.0 - 2.4	S 1.7	0.23	4.9 - 6.7	S 5.83	0.31	22
Ortho Vitros	17	4.3 - 6.3	S 5.32	0.33	2.2 - 2.9	S 2.52	0.12	6.7 - 8.9	S 7.8	0.38	1.2 - 1.8	S 1.5	0.09	6.3 - 8.0	S 7.15	0.29	23
Roche Elecsys	18	3.7 - 4.6	S 4.13	0.14	1.8 - 2.3	S 2.06	0.09	5.2 - 6.4	S 5.79	0.21	1.1 - 1.5	S 1.3	0.05	4.8 - 5.9	S 5.34	0.19	56
Siemens Advia	19	3.5 - 5.2	S 4.32	0.28	1.7 - 2.3	S 1.99	0.11	5.0 - 7.6	S 6.3	0.43	1.0 - 1.4	S 1.19	0.07	4.3 - 7.2	S 5.75	0.48	16
Siemens Dimension	20	2.8 - 5.1	S 3.94	0.38	1.2 - 2.4	S 1.81	0.19	4.3 - 7.3	S 5.78	0.5	0.8 - 1.3	S 1.09	0.08	4.1 - 6.3	S 5.19	0.37	27
Siemens Dimension LOCI	21	3.1 - 4.1	S 3.64	0.17	1.5 - 2.0	S 1.75	0.09	4.6 - 6.1	S 5.33	0.26	0.9 - 1.3	S 1.08	0.06	4.3 - 5.5	S 4.87	0.2	49
Siemens Immulite 3rd gen	22	3.2 - 5.3	S 4.22	0.35	1.3 - 2.5	S 1.93	0.2	5.0 - 7.8	S 6.38	0.47	0.8 - 1.5	S 1.14	0.13	4.3 - 7.1	S 5.7	0.47	20
Tosoh AIA	23	3.7 - 6.1	S 4.89	0.4	1.8 - 2.8	S 2.28	0.17	5.5 - 8.6	S 7.08	0.52	1.0 - 1.7	S 1.37	0.13	5.0 - 8.0	S 6.49	0.5	54
Initial Grouping by Sensitivity or Principle																	
Standardized methods	24	2.6 - 5.6	S 4.11	0.51	0.9 - 2.9	S 1.91	0.33	3.4 - 8.4	S 5.91	0.83	0.5 - 1.8	S 1.16	0.21	3.3 - 7.6	S 5.46	0.71	218
Tosoh and RIA	25	3.4 - 6.1	S 4.71	0.45	1.4 - 3.1	S 2.25	0.29	4.9 - 8.6	S 6.74	0.61	0.7 - 2.1	S 1.39	0.23	4.5 - 7.9	S 6.18	0.57	102
Siemens non Immulite	26	2.8 - 4.7	S 3.75	0.3	1.4 - 2.2	S 1.77	0.14	4.2 - 6.8	S 5.49	0.42	0.9 - 1.3	S 1.08	0.07	4.0 - 5.9	S 4.98	0.31	76
Total Population																	
Whole Population	27	2.5 - 5.9	S 4.2	0.57	1.0 - 3.0	S 1.97	0.34	3.5 - 8.6	S 6.05	0.84	0.5 - 1.9	S 1.2	0.23	3.3 - 7.8	S 5.56	0.74	398

Thyroxine, Free (FT4)

Initial Grouping by Reagent and Instrument																	
Abbott Cmia & Abbott Architect c, ci, i	1	3.0 - 4.7	S 3.84	0.28	2.7 - 4.5	S 3.59	0.29	2.8 - 5.5	S 4.17	0.45	2.6 - 4.2	S 3.4	0.25	2.7 - 5.5	S 4.12	0.47	21
Beckman Coulter Access & Beckman Coulter Access	2	2.4 - 3.5	S 2.95	0.17	2.7 - 3.8	S 3.24	0.2	2.3 - 3.3	S 2.82	0.17	2.8 - 4.0	S 3.43	0.2	2.4 - 3.3	S 2.83	0.16	54

Beckman Coulter Access & Beckman Coulter Dxl	3	2.5 - 3.5	S 2.99	0.16	2.9 - 3.9	S 3.39	0.15	2.4 - 3.3	S 2.88	0.15	2.9 - 4.3	S 3.59	0.24	2.6 - 3.3	S 2.92	0.12	14
MP Biomedicals & All gamma counters	4	1.7 - 2.9	S 2.3	0.2	1.4 - 2.7	S 2.03	0.22	1.9 - 3.4	S 2.66	0.24	1.4 - 2.7	S 2.03	0.22	2.1 - 3.1	S 2.6	0.18	20
Ortho Vitros & Ortho Vitros 3600, 5600	5	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	16
Roche Elecsys & Roche e/c, 1XX, X000, Elec series	6	3.3 - 4.8	S 4.09	0.25	3.3 - 4.8	S 4.09	0.25	3.4 - 5.1	S 4.24	0.28	3.2 - 4.9	S 4.05	0.3	3.1 - 5.2	S 4.19	0.35	10
Roche Elecsys & Roche e411/e601/E170/E2010	7	3.6 - 4.3	S 3.97	0.12	3.7 - 4.2	S 3.97	0.09	3.5 - 4.6	S 4.05	0.17	3.5 - 4.3	S 3.89	0.14	3.6 - 4.5	S 4.03	0.16	10
Siemens Advia/Centaur/CP/XP & Siemens Centaur/Centaur CP	8	2.2 - 3.8	S 2.98	0.26	2.4 - 3.9	S 3.11	0.25	2.4 - 3.8	S 3.09	0.24	2.5 - 4.0	S 3.24	0.25	2.1 - 3.9	S 3.0	0.3	13
Siemens Dimension & Siemens Dimension Xpand	9	3.3 - 4.8	S 4.02	0.25	3.6 - 4.6	S 4.1	0.18	3.3 - 4.7	S 4.01	0.23	3.7 - 4.9	S 4.28	0.2	3.1 - 4.8	S 3.97	0.29	12
Siemens Dimension LOCI & Siemens Dimension EXL	10	3.9 - 4.9	S 4.4	0.16	4.3 - 5.5	S 4.89	0.21	3.6 - 4.8	S 4.24	0.2	4.3 - 5.9	S 5.1	0.26	3.8 - 4.8	S 4.28	0.17	42
Tosoh AIA & Tosoh AIA	11	3.5 - 5.3	S 4.4	0.29	3.5 - 5.7	S 4.63	0.37	3.6 - 5.3	S 4.47	0.29	3.5 - 6.0	S 4.75	0.42	3.6 - 5.3	S 4.45	0.29	22

Initial Grouping by Reagent

Abbott CMIA	12	3.0 - 4.7	S 3.84	0.28	2.7 - 4.5	S 3.59	0.29	2.8 - 5.5	S 4.17	0.45	2.6 - 4.2	S 3.4	0.25	2.7 - 5.5	S 4.12	0.47	21
Beckman Coulter Access	13	2.5 - 3.5	S 2.96	0.17	2.7 - 3.9	S 3.27	0.2	2.3 - 3.3	S 2.83	0.16	2.8 - 4.1	S 3.47	0.22	2.4 - 3.3	S 2.85	0.15	70
MP Biomedicals	14	1.7 - 2.9	S 2.3	0.2	1.4 - 2.7	S 2.03	0.22	1.9 - 3.4	S 2.66	0.24	1.4 - 2.7	S 2.03	0.22	2.1 - 3.1	S 2.6	0.18	20
Ortho Vitros	15	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	22
Roche Elecsys	16	3.3 - 4.7	S 3.98	0.23	3.3 - 4.7	S 4.0	0.22	3.4 - 4.8	S 4.11	0.24	3.2 - 4.7	S 3.94	0.26	3.3 - 4.9	S 4.08	0.27	30
Siemens Advia/Centaur/CP/XP	17	2.2 - 3.8	S 2.98	0.26	2.4 - 3.9	S 3.11	0.25	2.4 - 3.8	S 3.09	0.24	2.5 - 4.0	S 3.24	0.25	2.1 - 3.9	S 3.0	0.3	13
Siemens Dimension	18	3.4 - 4.8	S 4.09	0.24	3.3 - 5.3	S 4.28	0.33	3.3 - 4.7	S 4.04	0.23	3.3 - 5.6	S 4.47	0.39	3.2 - 4.8	S 4.02	0.27	19
Siemens Dimension LOCI	19	3.9 - 4.9	S 4.39	0.16	4.3 - 5.5	S 4.88	0.21	3.6 - 4.8	S 4.24	0.2	4.3 - 5.9	S 5.1	0.26	3.8 - 4.8	S 4.28	0.17	43
Siemens Immulite (1-step)	20	3.1 - 4.2	S 3.62	0.18	3.4 - 4.8	S 4.13	0.23	3.1 - 3.8	S 3.44	0.13	3.6 - 5.2	S 4.4	0.28	2.9 - 4.0	S 3.46	0.19	11
Tosoh AIA	21	3.5 - 5.3	S 4.41	0.3	3.6 - 5.6	S 4.61	0.34	3.5 - 5.5	S 4.5	0.34	3.6 - 5.9	S 4.73	0.39	3.6 - 5.4	S 4.46	0.3	30

Initial Grouping by Sensitivity or Principle

Standardized methods	22	1.3 - 5.6	S 3.46	0.72	1.3 - 5.8	S 3.56	0.76	1.1 - 5.9	S 3.52	0.8	1.3 - 5.9	S 3.63	0.77	1.2 - 5.8	S 3.51	0.77	183
Vitros and related	23	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	6.8 - 7.1	S 6.93	0.05	22
Siemens non-Immulite	24	2.4 - 5.7	S 4.07	0.56	2.3 - 6.5	S 4.42	0.7	2.6 - 5.4	S 3.99	0.47	2.4 - 6.8	S 4.61	0.75	2.4 - 5.5	S 3.98	0.52	75
All Immulite	25	3.1 - 4.1	S 3.61	0.18	3.4 - 4.8	S 4.08	0.24	3.1 - 3.8	S 3.42	0.12	3.4 - 5.3	S 4.34	0.31	2.9 - 4.0	S 3.44	0.18	14

Total Population

Whole Population	26	0.6 - 7.2	S 3.88	1.11	0.7 - 7.5	S 4.06	1.13	0.5 - 7.2	S 3.89	1.11	0.7 - 7.6	S 4.16	1.15	0.6 - 7.2	S 3.88	1.11	296
------------------	----	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----

Thyroxine, Total (TT4)

Initial Grouping by Reagent and Instrument

Abbott CMIA & Abbott Architect c, ci, i	1	9.3 - 14.0	P 11.67	0.61	7.2 - 10.8	P 9.0	0.36	11.4 - 17.2	P 14.3	0.67	6.4 - 9.6	P 8.0	0.3	10.6 - 15.9	P 13.27	0.62	10
Beckman Coulter Access & Beckman Coulter Access	2	10.9 - 16.3	P 13.61	0.82	9.0 - 13.5	P 11.22	0.77	12.3 - 18.5	P 15.4	1.16	8.3 - 12.5	P 10.39	0.61	12.0 - 17.9	P 14.94	1.18	19
Siemens Dimension & Siemens Dimension EXL	3	10.9 - 16.4	P 13.66	0.58	8.2 - 12.3	P 10.29	0.66	13.3 - 19.9	P 16.6	0.71	7.3 - 10.9	P 9.09	0.68	12.8 - 19.1	P 15.95	0.84	16

Initial Grouping by Reagent

Abbott CMIA	4	9.3 - 14.0	P 11.67	0.61	7.2 - 10.8	P 9.0	0.36	11.4 - 17.2	P 14.3	0.67	6.4 - 9.6	P 8.0	0.3	10.6 - 15.9	P 13.27	0.62	10
Beckman Coulter Access	5	10.8 - 16.2	P 13.49	0.83	8.9 - 13.4	P 11.18	0.73	12.2 - 18.4	P 15.3	1.05	8.2 - 12.3	P 10.28	0.73	11.9 - 17.9	P 14.9	1.05	29
Roche Elecsys	6	9.5 - 14.2	P 11.85	0.75	7.2 - 10.9	P 9.06	0.6	11.8 - 17.7	P 14.73	1.1	6.5 - 9.8	P 8.14	0.63	11.2 - 16.8	P 13.99	0.94	16
Siemens Dimension	7	10.9 - 16.4	P 13.67	0.74	8.2 - 12.3	P 10.25	0.69	13.3 - 20.0	P 16.64	0.9	7.3 - 10.9	P 9.08	0.73	12.8 - 19.2	P 16.02	0.89	22
Tosoh AIA	8	10.0 - 15.0	P 12.47	1.39	7.9 - 11.8	P 9.87	0.84	12.3 - 18.5	P 15.42	1.78	7.0 - 10.5	P 8.77	0.63	11.8 - 17.7	P 14.77	1.33	10

Initial Grouping by Sensitivity or Principle

Standardized methods	9	10.2 - 15.3	P 12.75	1.45	7.8 - 11.7	P 9.75	0.94	12.5 - 18.7	P 15.57	1.91	7.0 - 10.5	P 8.71	0.82	11.8 - 17.7	P 14.75	1.76	88
Beckman Coulter and related	10	10.8 - 16.2	P 13.49	0.83	8.9 - 13.4	P 11.18	0.73	12.2 - 18.4	P 15.3	1.05	8.2 - 12.3	P 10.28	0.73	11.9 - 17.9	P 14.9	1.05	29

Total Population

Whole Population	11	10.3 - 15.5	P 12.93	1.36	8.1 - 12.1	P 10.11	1.08	12.4 - 18.6	P 15.5	1.74	7.3 - 10.9	P 9.1	1.05	11.8 - 17.7	P 14.79	1.62	117
------------------	----	-------------	---------	------	------------	---------	------	-------------	--------	------	------------	-------	------	-------------	---------	------	-----

Triiodothyronine, Total (TT3)

Initial Grouping by Reagent and Instrument

Beckman Coulter Access & Beckman Coulter Access	1	1.77 - 2.17	S 1.972	0.068	1.33 - 1.8	S 1.566	0.077	2.08 - 2.69	S 2.385	0.101	1.2 - 1.69	S 1.442	0.082	1.98 - 2.54	S 2.259	0.093	19
Beckman Coulter Access & Beckman Coulter Dxl	2	1.72 - 2.51	S 2.118	0.131	1.2 - 2.02	S 1.609	0.136	2.1 - 3.17	S 2.633	0.179	1.17 - 1.73	S 1.45	0.093	2.17 - 2.88	S 2.522	0.118	10
MP Biomedicals & All gamma counters	3	1.57 - 2.61	S 2.09	0.173	1.32 - 1.66	S 1.493	0.057	2.12 - 3.72	S 2.916	0.267	0.79 - 1.18	S 0.985	0.066	1.91 - 3.79	S 2.847	0.313	13
Roche Elecsys & Roche e/c, 1XX, X000, Elec series	4	1.9 - 2.51	S 2.209	0.102	1.64 - 2.19	S 1.916	0.092	2.11 - 2.99	S 2.55	0.148	1.46 - 2.1	S 1.779	0.107	2.05 - 2.88	S 2.462	0.139	11
Siemens Advia & Siemens Centaur/Centaur CP	5	1.63 - 2.25	S 1.94	0.104	1.41 - 2.1	S 1.755	0.114	1.69 - 2.31	S 2.002	0.104	1.36 - 2.02	S 1.69	0.11	1.71 - 2.33	S 2.021	0.104	10

Initial Grouping by Reagent

Beckman Coulter Access	6	1.6 - 2.48	S 2.044	0.146	1.24 - 1.96	S 1.598	0.119	1.91 - 3.08	S 2.493	0.195	1.15 - 1.78	S 1.462	0.105	1.83 - 2.91	S 2.372	0.181	31
MP Biomedicals	7	1.57 - 2.61	S 2.09	0.173	1.32 - 1.66	S 1.493	0.057	2.12 - 3.72	S 2.916	0.267	0.79 - 1.18	S 0.985	0.066	1.91 - 3.79	S 2.847	0.313	13
Roche Elecsys	8	1.91 - 2.52	S 2.217	0.102	1.62 - 2.21	S 1.917	0.098	2.08 - 2.95	S 2.515	0.145	1.48 - 2.08	S 1.778	0.101	2.07 - 2.79	S 2.43	0.12	24
Siemens Advia	9	1.62 - 2.3	S 1.957	0.114	1.43 - 2.09	S 1.761	0.111	1.7 - 2.32	S 2.011	0.103	1.37 - 2.03	S 1.699	0.109	1.72 - 2.35	S 2.032	0.105	11

Initial Grouping by Sensitivity or Principle

Standardized methods	10	1.3 - 2.82	S 2.058	0.253	1.2 - 2.41	S 1.808	0.201	1.28 - 3.27	S 2.276	0.332	1.13 - 2.26	S 1.696	0.187	1.35 - 3.1	S 2.227	0.291	40
Beckman Coulter and related	11	1.59 - 2.53	S 2.057	0.156	1.22 - 1.92	S 1.569	0.116	1.74 - 3.49	S 2.618	0.292	0.61 - 2.03	S 1.321	0.237	1.57 - 3.46	S 2.513	0.314	44

Total Population

Whole Population	12	0 - 4.91	S 2.227	0.893	0 - 4.23	S 1.824	0.801	0 - 5.51	S 2.615	0.965	0 - 4.02	S 1.627	0.797	0 - 5.35	S 2.535	0.939	103
------------------	----	----------	---------	-------	----------	---------	-------	----------	---------	-------	----------	---------	-------	----------	---------	-------	-----

T-Uptake % of Total

Initial Grouping by Reagent and Instrument

Beckman Coulter Access & Beckman Coulter Access	1	37 - 63	S 49.8	4.3	39 - 67	S 52.8	4.7	37 - 56	S 46.5	3.2	49 - 62	S 55.2	2.2	38 - 59	S 48.3	3.5	13
Siemens Dimension & Siemens Dimension EXL	2	39 - 47	S 43.0	1.3	39 - 52	S 45.5	2.2	38 - 46	S 41.9	1.2	40 - 52	S 46.0	1.9	38 - 47	S 42.3	1.6	10

Initial Grouping by Reagent

Beckman Coulter Access	3	39 - 61	S 49.8	3.7	41 - 64	S 52.7	3.9	38 - 55	S 46.9	2.8	48 - 63	S 55.4	2.6	39 - 57	S 48.1	3.0	21
Siemens Dimension	4	38 - 47	S 42.7	1.5	37 - 52	S 44.7	2.5	35 - 47	S 41.1	1.9	38 - 52	S 45.1	2.2	36 - 47	S 41.7	1.8	15

Initial Grouping by Sensitivity or Principle

Beckman Coulter and Vitros	5	32 - 73	S 52.7	6.8	37 - 73	S 55.1	6.0	28 - 73	S 50.3	7.6	44 - 71	S 57.3	4.5	30 - 73	S 51.3	7.2	26
Standardized methods	6	31 - 55	S 43.0	3.9	28 - 67	S 47.6	6.5	28 - 52	S 40.2	4.0	25 - 73	S 48.9	8.1	30 - 52	S 41.0	3.6	40

Total Population

Whole Population	7	25 - 68	S 46.6	7.1	28 - 72	S 50.3	7.3	21 - 67	S 43.9	7.6	28 - 76	S 51.9	8.0	23 - 67	S 44.8	7.4	68
------------------	---	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

T-Uptake Ratio to Normal

Initial Grouping by Reagent

Roche Elecsys	1	0.38 - 0.72	S 0.549	0.056	0.38 - 0.7	S 0.541	0.053	0.34 - 0.69	S 0.515	0.059	0.37 - 0.7	S 0.534	0.056	0.36 - 0.7	S 0.528	0.057	10
---------------	---	-------------	---------	-------	------------	---------	-------	-------------	---------	-------	------------	---------	-------	------------	---------	-------	----

Initial Grouping by Sensitivity or Principle

luminometric	2	0.34 - 0.83	S 0.589	0.081	0.39 - 0.71	S 0.551	0.052	0.18 - 1.01	S 0.594	0.137	0.37 - 0.69	S 0.53	0.054	0.24 - 0.95	S 0.595	0.119	14
--------------	---	-------------	---------	-------	-------------	---------	-------	-------------	---------	-------	-------------	--------	-------	-------------	---------	-------	----

Total Population

Whole Population	3	0.34 - 0.83	S 0.589	0.081	0.39 - 0.71	S 0.551	0.052	0.18 - 1.01	S 0.594	0.137	0.37 - 0.69	S 0.53	0.054	0.24 - 0.95	S 0.595	0.119	14
------------------	---	-------------	---------	-------	-------------	---------	-------	-------------	---------	-------	-------------	--------	-------	-------------	---------	-------	----