



Lyphocheck® Immunoassay Plus Control Levels 1, 2 and 3

REF 370 Trilevel 12 x 5 mL
371 Level 1 12 x 5 mL
372 Level 2 12 x 5 mL
373 Level 3 12 x 5 mL
370X MiniPak 3 x 5 mL



Level 1 40431
Level 2 40432
Level 3 40433



<https://www.myeinserts.com/40430>

Revision Date 2023-04-13 → Indicates Revised Information

METHOD (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
17-ALPHA-HYDROXYPROGESTERONE (2)							
Diagnostics Biochem Canada ELISA	ng/mL	\$		\$		\$	
DRG ELISA (EIA-1292)	ng/mL	0.640	0.350 – 0.920	2.16	1.19 – 3.13	6.36	3.50 – 9.22
IBL ELISA	ng/mL	0.610	0.210 – 1.00	2.33	1.28 – 3.37	6.21	3.41 – 9.00
Monobind AccuLite CLIA 17-OHP-SI	ng/mL	0.490	0.330 – 0.650	1.83	1.23 – 2.44	4.65	3.12 – 6.19
ACETAMINOPHEN (2)							
SEKURE (Sekisui Diagnostics)	µg/mL	10.3	7.70 – 12.9	34.0	25.5 – 42.5	113	84.4 – 141
ACTH (2)							
Biomerica ELISA	pg/mL	\$		\$		\$	
Monobind AccuBind ELISA	pg/mL	18.0	12.1 – 23.9	85.7	57.4 – 114	158	106 – 210
Monobind AccuLite CLIA	pg/mL	16.1	10.8 – 21.4	91.7	61.4 – 122	164	110 – 219
AFP (2)							
DRG ELISA (EIA-1468)	ng/mL	28.7	18.9 – 38.4	157	103 – 210	>193	
Monobind AccuBind ELISA	ng/mL	14.1	9.43 – 18.7	96.1	64.4 – 128	212	142 – 282
Monobind AccuLite CLIA	ng/mL	13.1	8.78 – 17.4	90.9	60.9 – 121	198	133 – 263
ALDOSTERONE (2)							
Beckman Coulter RIA (DSL8600)	pg/mL	117	76.0 – 158	294	205 – 382	770	539 – 1001
Monobind AccuBind ELISA	pg/mL	159	101 – 218	358	240 – 476	913	612 – 1214
Monobind AccuLite CLIA	pg/mL	146	98.0 – 195	325	218 – 432	860	576 – 1143
ANDROSTENEDIONE							
Beckman Coulter RIA (DSL3800) (2)	ng/mL	0.510	0.330 – 0.690	1.37	0.960 – 1.78	2.81	1.96 – 3.65
Calbiotech ELISA (2)	ng/mL	2.03	1.35 – 2.70	5.45	3.63 – 7.26	8.56	5.70 – >10.0
Diagnostics Biochem Canada ELISA (2)	ng/mL	\$		\$		\$	
DRG ELISA (EIA-3265) (2)	ng/mL	0.480	0.270 – 0.700	1.35	0.740 – 1.96	3.19	1.76 – 4.63
Monobind AccuBind ELISA (ANST) (2)	ng/mL	1.11	0.740 – 1.48	3.17	2.13 – 4.22	6.66	4.46 – 8.85
Monobind AccuLite CLIA (ANST) (2)	ng/mL	1.12	0.750 – 1.48	3.06	2.05 – 4.07	6.35	4.25 – 8.45
Siemens Atellica Solution (ANDRO) (IM)	ng/mL	0.607	0.328 – 0.885	1.29	0.771 – 1.80	2.42	1.51 – 3.33
CAFFEINE							
Emit	µg/mL	2.15	1.39 – 2.91	7.05	4.90 – 9.20	14.3	10.1 – 18.5
CALCITONIN							
Biomerica ELISA (2)	pg/mL	\$		\$		\$	
Monobind AccuBind ELISA (2)	pg/mL	27.6	18.5 – 36.8	178	119 – 237	326	218 – 433
Monobind AccuLite CLIA (2)	pg/mL	27.2	18.2 – 36.1	171	114 – 227	294	197 – 391
Siemens Atellica Solution (CALCT) (IM)	pg/mL	28.0	14.0 – 42.0	170	121 – 218	359	264 – 454
CEA (2)							
Monobind AccuBind ELISA	ng/mL	1.84	1.23 – 2.45	15.6	10.5 – 20.8	22.8	15.2 – 30.3
Monobind AccuLite CLIA	ng/mL	1.98	1.33 – 2.64	14.2	9.49 – 18.8	21.4	14.3 – 28.5
CORTISOL (2)							
DRG ELISA (EIA-1887)	ng/mL	31.0	19.8 – 42.1	207	133 – 282	308	197 – 420

METHOD (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
C-PEPTIDE (2)							
Calbiotech ELISA	ng/mL	0.740	0.490 – 0.980	3.67	2.45 – 4.90	6.48	4.32 – 8.64
DRG ELISA (EIA-1293)	ng/mL	1.18	0.650 – 1.71	4.35	2.39 – 6.31	6.71	3.69 – 9.73
Monobind AccuBind ELISA	ng/mL	1.08	0.730 – 1.44	3.61	2.42 – 4.80	5.89	3.95 – 7.83
Monobind AccuLite CLIA	ng/mL	1.01	0.670 – 1.34	3.63	2.43 – 4.82	5.54	3.71 – 7.36
DEHYDROEPIANDROSTERONE-SULFATE (DHEA-SULFATE) (2)							
Beckman Coulter RIA DHEA-S-7 (DSL2700)	ng/mL	629	472 – 786	1815	1361 – 2268	5109	3576 – 6641
Calbiotech ELISA	µg/mL	1.38	0.920 – 1.84	2.58	1.72 – 3.44	7.62	5.08 – 10.2
DRG ELISA (EIA-1562)	µg/mL	0.550	0.300 – 0.800	1.40	0.770 – 2.04	4.37	2.40 – 6.33
IBL ELISA	µg/mL	0.870	0.560 – 1.17	2.34	1.52 – 3.16	7.44	4.84 – 10.0
Monobind AccuBind ELISA	µg/mL	0.700	0.470 – 0.930	2.33	1.56 – 3.10	6.94	4.65 – >8.00
Monobind AccuLite CLIA	µg/mL	0.670	0.450 – 0.880	2.23	1.49 – 2.96	6.45	4.32 – >8.00
DIGOXIN (2)							
Monobind AccuBind ELISA	ng/mL	0.760	0.510 – 1.02	2.19	1.46 – 2.91	3.41	2.28 – >4.00
Monobind AccuLite CLIA	ng/mL	0.780	0.520 – 1.04	2.21	1.48 – 2.94	3.52	2.36 – >4.00
ESTRADIOL (2)							
Beckman Coulter RIA US Estradiol (DSL4800)	pg/mL	65.0	39.0 – 91.0	111	66.3 – 155	206	123 – 288
Calbiotech ELISA	pg/mL	81.2	54.2 – 108	272	181 – 363	695	463 – 926
DRG ELISA (EIA-2963)	pg/mL	147	82.3 – 212	467	261 – 672	940	526 – 1353
Monobind AccuBind ELISA	pg/mL	97.5	64.8 – 130	235	157 – 312	392	262 – 521
Monobind AccuLite CLIA	pg/mL	111	74.5 – 148	221	148 – 293	345	231 – 459
ESTRIOL (FREE) (2)							
Calbiotech ELISA	ng/mL	6.57	4.38 – 8.76	13.8	9.22 – 18.4	30.0	20.0 – >30.0
DRG ELISA (EIA-1612)	ng/mL	1.97	1.08 – 2.85	6.41	3.52 – 9.29	13.6	7.46 – 19.7
Monobind AccuBind ELISA	ng/mL	3.28	2.20 – 4.37	9.80	6.57 – 13.0	20.8	12.8 – 28.8
Monobind AccuLite CLIA	ng/mL	3.19	2.13 – 4.24	10.1	6.77 – 13.4	23.0	15.4 – >30.0
ETHOSUXIMIDE							
Emit	µg/mL	27.1	21.2 – 33.0	67.9	53.4 – 82.5	107	83.9 – 130
FERRITIN (2)							
Monobind AccuBind ELISA	ng/mL	58.8	39.4 – 78.2	155	104 – 206	352	236 – 468
Monobind AccuLite CLIA	ng/mL	59.4	39.8 – 79.0	142	95.3 – 189	345	231 – 458
FOLATE							
Monobind AccuBind ELISA (2)	ng/mL	3.61	2.42 – 4.81	6.27	4.20 – 8.34	8.38	5.62 – 11.2
Monobind AccuLite CLIA (2)	ng/mL	2.72	1.82 – 3.62	5.31	3.56 – 7.07	8.15	5.46 – 10.8
FOLLICLE STIMULATING HORMONE (FSH) (2)							
Calbiotech ELISA	mIU/mL	3.58	2.39 – 4.77	10.7	7.11 – 14.2	19.2	12.8 – 25.6
DRG ELISA (EIA-1288)	mIU/mL	7.43	4.08 – 10.8	20.7	11.4 – 30.0	38.9	21.4 – 56.5
Monobind AccuBind ELISA	mIU/mL	7.38	4.94 – 9.81	22.5	15.1 – 30.0	46.8	31.4 – 62.3
Monobind AccuLite CLIA	mIU/mL	7.37	4.94 – 9.80	22.6	15.2 – 30.1	47.6	31.9 – 63.4
HCG (2)							
DRG ELISA (EIA-1469)	mIU/mL	■		27.2	16.9 – 37.5	192	119 – 265
Monobind AccuBind ELISA	mIU/mL	6.25	4.19 – 8.32	19.1	12.8 – 25.4	234	157 – >250
Monobind AccuBind ELISA (hCG-XR)	mIU/mL	5.09	3.41 – 6.78	17.4	11.7 – 23.2	176	118 – 234
Monobind AccuBind ELISA (Rapid hCG)	mIU/mL	6.92	4.63 – 9.20	17.7	11.8 – 23.5	235	157 – >250
Monobind AccuLite CLIA	mIU/mL	7.15	4.79 – 9.51	17.4	11.7 – 23.2	227	152 – >250
Monobind AccuLite CLIA (hCG-XR)	mIU/mL	4.98	3.33 – 6.62	17.3	11.6 – 22.9	177	119 – 235
HCG-BETA SUBUNIT (2)							
DRG ELISA (EIA-1911)	mIU/mL	2.44	1.51 – 3.36	12.0	7.46 – 16.6	123	76.6 – 170
HUMAN GROWTH HORMONE (HGH) (2)							
Calbiotech ELISA	ng/mL	3.60	2.40 – 4.79	16.6	11.1 – 22.1	30.1	20.1 – >40.0
MEDIAGNOST ELISA	µIU/mL	10.2	8.20 – 12.2	30.5	24.4 – 36.6	56.7	45.4 – 68.1
Monobind AccuBind ELISA	µIU/mL	12.7	8.52 – 16.9	37.2	25.0 – 49.5	78.9	52.9 – 105
Monobind AccuLite CLIA	µIU/mL	14.2	9.48 – 18.8	43.1	28.8 – 57.3	80.6	54.0 – 107
IGF-1/SOMATOMEDIN C (2)							
MEDIAGNOST IGF-1 ELISA (IGFBP Blocked)	ng/mL	112	80.0 – 145	123	84.0 – 161	107	68.0 – 146
MEDIAGNOST IGF-1 RIA (IGFBP Blocked)	ng/mL	112	80.0 – 145	123	84.0 – 161	107	68.0 – 146

METHOD (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
IMMUNOGLOBULIN E (IGE)							
ImmunoCAP total IgE	IU/mL	\$		\$		\$	
Monobind AccuBind ELISA (2)	IU/mL	310	207 – >400	86.5	57.9 – 115	96.1	64.4 – 128
Monobind AccuLite CLIA (2)	IU/mL	315	211 – >400	82.9	55.5 – 110	93.8	62.9 – 125
INSULIN (2)							
Calbiotech ELISA	µIU/mL	16.4	10.9 – 21.8	57.6	38.4 – 76.9	>100	
DRG ELISA (EIA-2935)	µIU/mL	20.7	11.4 – 30.0	83.9	46.1 – >100	>100	
Monobind AccuBind ELISA	µIU/mL	12.9	8.67 – 17.2	49.9	33.4 – 66.3	151	101 – 201
Monobind AccuLite CLIA	µIU/mL	13.0	8.71 – 17.3	48.5	32.5 – 64.6	145	96.9 – 192
LIDOCAINE							
Emit	µg/mL	1.35	<1.00 – 1.70	3.90	2.98 – 4.82	7.42	5.71 – 9.12
LUTEINIZING HORMONE (LH) (2)							
Calbiotech ELISA	mIU/mL	1.37	0.910 – 1.82	15.7	10.5 – 20.9	45.4	30.2 – >50.0
DRG Serum ELISA (EIA-1289)	mIU/mL	3.11	1.71 – 4.52	21.5	11.8 – 31.2	55.8	30.7 – 81.0
Monobind AccuBind ELISA	mIU/mL	1.93	1.29 – 2.57	23.7	15.9 – 31.5	79.8	53.5 – 106
Monobind AccuLite CLIA	mIU/mL	<5.00		23.6	15.8 – 31.4	79.3	53.1 – 105
PRIMIDONE							
Emit	µg/mL	3.03	<2.50 – 3.79	5.55	4.43 – 6.67	12.4	10.3 – 14.5
PROGESTERONE (2)							
Diagnostics Biochem Canada ELISA	ng/mL	\$		\$		\$	
DRG ELISA (EIA-1561)	ng/mL	0.680	0.370 – 0.980	7.64	4.20 – 11.1	39.7	21.9 – >40.0
Monobind AccuBind ELISA	ng/mL	0.830	0.560 – 1.11	13.0	8.69 – 17.3	28.4	19.0 – 37.7
Monobind AccuLite CLIA	ng/mL	0.940	0.540 – 1.34	13.2	8.82 – 17.5	28.4	19.0 – 37.7
PROLACTIN (2)							
Calbiotech ELISA	ng/mL	8.08	5.39 – 10.8	22.5	15.0 – 30.0	57.0	38.0 – 76.1
DRG ELISA (EIA-1291)	ng/mL	6.41	3.53 – 9.29	14.4	7.92 – 20.9	29.4	16.2 – 42.6
Monobind AccuBind ELISA	ng/mL	8.53	5.71 – 11.3	23.2	15.5 – 30.8	49.3	33.0 – 65.6
Monobind AccuLite CLIA	ng/mL	7.95	5.33 – 10.6	25.2	16.9 – 33.5	53.5	35.8 – 71.1
PSA (TOTAL) (2)							
Monobind AccuBind ELISA	ng/mL	<2.00		4.84	3.25 – 6.44	29.1	19.5 – 38.6
Monobind AccuBind ELISA (tPSA-XS)	ng/mL	0.630	0.420 – 0.830	3.73	2.45 – 5.01	>25.0	
Monobind AccuLite CLIA	ng/mL	<2.00		4.55	3.05 – 6.05	28.8	19.3 – 38.2
Monobind AccuLite CLIA (tPSA-XS)	ng/mL	0.600	0.400 – 0.800	3.40	2.28 – 4.52	23.7	15.9 – >25.0
SALICYLATE (2)							
SEKURE (Sekisui Diagnostics)	mg/dL	<5.30		15.3	11.5 – 19.1	41.6	31.2 – 52.0
T3 (FREE) (2)							
Calbiotech ELISA	pg/mL	3.91	2.61 – 5.21	7.02	4.68 – 9.36	11.5	7.67 – 15.4
Monobind AccuBind ELISA	pg/mL	2.75	1.75 – 3.76	5.29	3.54 – 7.03	7.47	5.00 – 9.93
Monobind AccuLite CLIA	pg/mL	2.60	1.74 – 3.46	5.15	3.45 – 6.85	7.49	5.02 – 9.96
T3 (TOTAL) (2)							
Monobind AccuBind ELISA	ng/mL	0.990	0.660 – 1.32	2.95	1.98 – 3.92	4.41	2.95 – 5.86
Monobind AccuLite CLIA	ng/mL	1.10	0.690 – 1.51	3.15	2.11 – 4.19	4.90	3.28 – 6.51
T3 UPTAKE/T UPTAKE (2)							
Monobind AccuBind ELISA	% Uptake	31.0	27.6 – 34.4	39.8	35.1 – 44.6	45.4	41.4 – 49.3
Monobind AccuLite CLIA	% Uptake	30.6	27.6 – 33.7	37.7	31.8 – 43.6	45.2	41.9 – 48.6
T4 (FREE) (2)							
EUROIMMUN RIA CT	ng/dL	\$		\$		\$	
Monobind AccuBind ELISA	ng/dL	1.19	0.800 – 1.58	2.34	1.57 – 3.11	3.14	2.10 – 4.17
Monobind AccuLite CLIA	ng/dL	1.18	0.790 – 1.57	2.37	1.59 – 3.15	3.07	2.05 – 4.08
T4 (TOTAL) (2)							
Monobind AccuBind ELISA	µg/dL	5.65	3.79 – 7.52	9.93	6.65 – 13.2	13.5	9.03 – 17.9
Monobind AccuLite CLIA	µg/dL	5.48	3.67 – 7.28	9.40	6.30 – 12.5	12.2	8.19 – 16.3
TESTOSTERONE (2)							
DRG ELISA (EIA-1559)	ng/mL	1.63	0.940 – 2.31	4.40	2.55 – 6.25	9.13	5.30 – 13.0
TESTOSTERONE (FREE) (2)							
Beckman Coulter RIA (DSL4900) →	pg/mL	2.88	1.87 – 3.89	10.9	7.09 – 14.7	27.9	19.5 – 36.3

METHOD (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
THYROID STIMULATING HORMONE (TSH) (2)							
Fortress Diagnostics	µIU/mL	▲		▲		▲	
Monobind AccuBind ELISA	µIU/mL	0.480	0.320 – 0.640	6.19	4.15 – 8.23	37.1	24.8 – >40.0
Monobind AccuBind ELISA (Rapid TSH)	µIU/mL	0.490	0.330 – 0.650	5.53	3.71 – 7.35	32.9	22.0 – 43.7
Monobind AccuLite CLIA	µIU/mL	0.520	0.350 – 0.700	5.89	3.94 – 7.83	34.0	22.8 – >40.0
Monobind AccuLite CLIA (Rapid TSH)	µIU/mL	§		§		§	

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
Abbott Alinity c Analyzer							
Amikacin	µg/mL	4.00	3.00 – 5.00	12.0	9.52 – 14.5	23.0	18.4 – 27.6
Carbamazepine	µg/mL	<1.90		7.38	6.16 – 8.60	10.9	9.36 – 12.4
Gentamicin	µg/mL	2.15	1.43 – 2.87	4.43	3.56 – 5.31	6.92	5.84 – 7.99
Lithium	mmol/L	0.438	0.279 – 0.598	1.16	0.962 – 1.35	1.76	1.54 – 1.99
Phenobarbital	µg/mL	6.63	4.29 – 8.96	19.1	14.5 – 23.7	42.4	32.3 – 52.4
Phenytoin	µg/mL	6.00	4.73 – 7.27	12.3	10.2 – 14.5	22.7	18.8 – 26.5
Salicylate	mg/dL	<5.00		15.1	12.1 – 18.0	42.6	35.4 – 49.7
Theophylline	µg/mL	3.58	2.64 – 4.53	13.3	10.1 – 16.4	25.2	19.2 – 31.2
Tobramycin	µg/mL	0.685	0.492 – 0.879	2.51	2.15 – 2.86	5.34	4.73 – 5.95
Valproic Acid	µg/mL	31.6	24.0 – 39.3	76.0	64.9 – 87.2	110	96.3 – 124
Vancomycin	µg/mL	7.11	5.63 – 8.59	18.0	15.2 – 20.9	35.1	30.0 – 40.1
Abbott Alinity i Analyzer							
AFP	ng/mL	15.4	13.2 – 17.6	95.0	81.7 – 108	205	176 – 233
CEA	ng/mL	2.33	1.82 – 2.84	20.2	17.5 – 22.8	40.5	35.3 – 45.6
Cortisol	µg/dL	2.96	2.17 – 3.74	16.4	13.9 – 18.8	25.0	21.5 – 28.4
C-Peptide	ng/mL	1.50	1.13 – 1.86	5.02	4.05 – 5.98	8.10	6.60 – 9.59
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate)	µg/dL	77.5	65.7 – 89.3	177	153 – 201	625	544 – 707
Estradiol	pg/mL	88.6	65.1 – 112	200	168 – 232	316	275 – 356
Ferritin	ng/mL	73.0	61.8 – 84.2	257	209 – 305	674	541 – 806
Folate	ng/mL	4.38	2.23 – 6.52	10.0	6.57 – 13.4	18.1	12.8 – >20.0
Follicle Stimulating Hormone (FSH)	mIU/mL	7.25	6.29 – 8.22	20.6	17.9 – 23.4	40.2	34.7 – 45.7
hCG	mIU/mL	5.88	4.02 – 7.75	24.8	20.3 – 29.3	237	203 – 271
Luteinizing Hormone (LH)	mIU/mL	1.09	0.947 – 1.22	12.8	11.0 – 14.5	46.9	40.5 – 53.4
Progesterone	ng/mL	0.507	<0.500 – 0.709	8.93	7.07 – 10.8	22.1	17.7 – 26.6
Prolactin	ng/mL	7.48	6.36 – 8.60	20.8	17.4 – 24.1	42.6	35.5 – 49.7
PSA (Free)	ng/mL	0.399	0.296 – 0.502	2.10	1.67 – 2.53	13.4	10.8 – 16.0
PSA (Total)	ng/mL	0.508	0.391 – 0.625	2.72	2.20 – 3.23	16.2	13.1 – 19.2
T3 (Free)	pg/mL	2.78	2.11 – 3.45	8.12	6.51 – 9.72	14.4	12.0 – 16.8
T3 (Total)	ng/mL	\$		\$		\$	
T3 Uptake/T Uptake	T Uptake Unit	0.893	0.758 – 1.03	0.780	0.615 – 0.945	0.802	0.640 – 0.963
T4 (Free)	ng/dL	0.840	0.719 – 0.961	1.97	1.54 – 2.40	3.06	2.29 – 3.83
T4 (Total)	µg/dL	5.90	5.10 – 6.70	10.4	8.88 – 11.9	13.4	11.4 – 15.4
Testosterone	ng/dL	176	129 – 224	365	281 – 448	794	629 – 960
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.363	0.291 – 0.434	4.82	4.16 – 5.47	27.4	23.6 – 31.1
Vitamin B12	pg/mL	353	255 – 451	557	427 – 686	786	620 – 951
ABBOTT ARCHITECT cSYSTEMS							
Acetaminophen (MULTIGENT)	µg/mL	9.82	6.96 – 12.7	34.5	27.6 – 41.5	115	94.8 – 134
Carbamazepine (5P05-21)	µg/mL	<1.90		7.53	6.13 – 8.94	11.2	9.26 – 13.2
Digoxin (MULTIGENT)	ng/mL	0.686	0.485 – 0.886	2.05	1.73 – 2.36	3.44	3.01 – 3.88
Gentamicin (MULTIGENT)	µg/mL	2.51	1.94 – 3.07	5.18	4.40 – 5.97	7.65	6.67 – 8.63
Immunoglobulin A (IgA)	mg/dL	171	142 – 201	149	125 – 173	149	125 – 174
Immunoglobulin E (IgE) (MULTIGENT)	IU/mL	\$		\$		\$	
Immunoglobulin G (IgG)	mg/dL	873	688 – 1059	751	591 – 911	744	585 – 903
Immunoglobulin M (IgM)	mg/dL	66.5	50.6 – 82.4	61.9	46.4 – 77.3	58.4	43.3 – 73.5
Iron	µg/dL	120	106 – 134	80.3	68.6 – 91.9	81.5	69.8 – 93.2
Lithium (MULTIGENT)	mEq/L	0.467	0.369 – 0.565	1.22	1.06 – 1.37	1.84	1.64 – 2.04
Phenobarbital (5P07-21)	µg/mL	\$		\$		\$	
Phenytoin (5P08-21)	µg/mL	7.30	5.80 – 8.81	14.8	11.7 – 17.9	26.4	20.8 – 32.1
Salicylate (MULTIGENT)	mg/dL	<5.00		15.5	13.0 – 18.0	43.6	39.0 – 48.2
Theophylline (5P06-21)	µg/mL	4.31	3.50 – 5.13	15.6	12.9 – 18.2	29.0	23.9 – 34.0
Tobramycin (MULTIGENT)	µg/mL	0.712	0.510 – 0.913	2.56	2.20 – 2.92	5.40	4.80 – 6.00
Valproic Acid (MULTIGENT)	µg/mL	30.7	24.4 – 37.0	74.8	63.3 – 86.3	108	92.9 – 124
Vancomycin (MULTIGENT)	µg/mL	7.11	5.60 – 8.62	18.4	15.4 – 21.4	34.8	29.7 – 39.9
ABBOTT ARCHITECT iSYSTEMS							
AFP	ng/mL	16.1	13.1 – 19.0	95.3	82.5 – 108	205	179 – 232

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
ABBOTT ARCHITECT iSYSTEMS (continued)							
Carbamazepine (1P36-27)	µg/mL	\$		\$		\$	
CEA	ng/mL	2.31	1.64 – 2.98	21.2	17.5 – 25.0	42.2	35.1 – 49.3
Cortisol	µg/dL	2.64	1.92 – 3.35	16.0	13.4 – 18.6	23.9	20.3 – 27.6
C-Peptide	ng/mL	1.55	1.12 – 1.98	5.33	4.22 – 6.43	8.37	6.73 – 10.0
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate)	µg/dL	73.1	61.7 – 84.6	174	145 – 204	624	514 – 734
Digoxin	ng/mL	0.563	0.414 – 0.713	1.77	1.51 – 2.04	3.04	2.66 – 3.43
Estradiol	pg/mL	86.1	67.1 – 105	211	182 – 240	335	296 – 374
Ferritin	ng/mL	76.3	60.2 – 92.5	276	212 – 339	695	533 – 857
Folate	ng/mL	4.74	3.04 – 6.44	11.2	7.98 – 14.5		14.8 – >20.0
Follicle Stimulating Hormone (FSH)	mIU/mL	7.20	6.01 – 8.39	21.1	17.6 – 24.7	40.3	33.5 – 47.0
Gentamicin	µg/mL	2.24	1.90 – 2.58	4.86	4.00 – 5.71	7.88	6.43 – 9.33
hCG	mIU/mL	5.45	3.33 – 7.58	22.6	17.9 – 27.3	222	187 – 257
Insulin	µIU/mL	14.0	11.9 – 16.1	49.9	43.7 – 56.1	157	139 – 175
Luteinizing Hormone (LH)	mIU/mL	1.17	0.925 – 1.41	14.0	11.1 – 16.8	50.3	40.1 – 60.4
Phenobarbital	µg/mL	9.66	7.80 – 11.5	24.4	20.2 – 28.6	49.0	40.8 – 57.1
Phenytoin	µg/mL	6.65	5.62 – 7.68	13.6	11.3 – 15.8	24.1	20.0 – 28.3
Progesterone	ng/mL	0.655	0.478 – 0.832	10.3	7.95 – 12.6	26.1	20.2 – 32.0
Prolactin	ng/mL	7.61	6.08 – 9.13	20.3	16.4 – 24.2	41.3	33.5 – 49.1
PSA (Free)	ng/mL	0.370	0.324 – 0.415	1.92	1.57 – 2.27	13.4	10.8 – 16.0
PSA (Total)	ng/mL	0.476	0.342 – 0.610	2.55	2.04 – 3.06	16.8	13.7 – 20.0
T3 (Free)	pg/mL	▲		▲		▲	
T3 (Total)	ng/mL	▲		▲		▲	
T3 Uptake/T Uptake	T Uptake Unit	0.852	0.691 – 1.01	0.723	0.586 – 0.860	0.728	0.591 – 0.865
T4 (Free)	ng/dL	0.919	0.803 – 1.03	2.14	1.62 – 2.66	3.26	2.35 – 4.17
T4 (Total)	µg/dL	5.95	4.80 – 7.11	11.0	8.67 – 13.4	14.3	11.2 – 17.4
Testosterone	ng/dL	170	124 – 216	366	284 – 449	768	609 – 926
Theophylline	µg/mL	▲		▲		▲	
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.387	0.247 – 0.527	4.94	4.15 – 5.72	29.2	25.0 – 33.4
Valproic Acid	µg/mL	29.6	23.4 – 35.8	72.4	58.5 – 86.2	105	85.5 – 125
Vancomycin (1P30-28)	µg/mL	7.69	6.37 – 9.01	20.8	17.3 – 24.3	39.4	32.8 – 45.9
Vitamin B12	pg/mL	338	243 – 432	539	399 – 679	760	570 – 949
BECKMAN COULTER ACCESS / 2 / 2i							
AFP	ng/mL	17.2	12.4 – 22.0	101	75.4 – 127	220	165 – 275
CEA (CEA2)	ng/mL	2.14	1.65 – 2.63	20.6	16.7 – 24.6	40.3	32.6 – 48.0
Cortisol	µg/dL	3.03	1.99 – 4.07	19.8	15.2 – 24.3	31.3	24.3 – 38.3
C-Peptide (2)	ng/mL	1.22	0.850 – 1.59	3.89	2.72 – 5.06	6.38	4.47 – 8.29
Digoxin	ng/mL	0.823	0.602 – 1.04	2.17	1.75 – 2.59	3.55	2.92 – 4.17
Estradiol	pg/mL	109	55.4 – 163	351	244 – 459	649	474 – 823
Estradiol (Sensitive)	pg/mL	96.9	43.6 – 150	254	167 – 342	408	288 – 529
Estriol (Free) (Unconjugated Estriol)	ng/mL	1.37	0.934 – 1.80	4.00	3.09 – 4.90	>6.90	
Ferritin	ng/mL	50.1	39.4 – 60.8	142	111 – 173	342	265 – 418
Folate (FOLW)	ng/mL	4.01	3.00 – 5.02	8.88	6.92 – 10.8	15.4	12.2 – 18.6
Follicle Stimulating Hormone (FSH) (hFSH)	mIU/mL	9.34	7.04 – 11.6	27.2	20.7 – 33.7	47.8	36.4 – 59.3
hCG (Total hCG) (5th IS)	mIU/mL	6.39	5.06 – 7.71	25.9	21.3 – 30.4	247	206 – 287
Insulin (Ultrasensitive Insulin)	µIU/mL	15.3	12.2 – 18.3	54.8	45.1 – 64.5	170	141 – 199
Luteinizing Hormone (LH) (hLH)	mIU/mL	1.23	0.864 – 1.60	15.7	12.1 – 19.2	59.5	46.3 – 72.7
Progesterone	ng/mL	0.637	0.409 – 0.864	11.1	8.79 – 13.3	27.1	21.7 – 32.5
Progesterone (P4DE)	ng/mL	0.381	0.234 – 0.530	8.83	6.83 – 10.8	23.6	18.4 – 28.8
Prolactin	ng/mL	6.20	5.02 – 7.38	17.4	14.2 – 20.5	35.1	28.8 – 41.3
PSA (Free) (Hybritech free PSA)	ng/mL	0.464	0.379 – 0.548	2.18	1.79 – 2.56	14.5	12.0 – 17.1
PSA (Free) (WHO 96/668)	ng/mL	0.365	0.298 – 0.431	1.77	1.41 – 2.08	11.5	9.50 – 13.5
PSA (Total) (Hybritech PSA)	ng/mL	▲		▲		▲	
PSA (Total) (WHO 96/670)	ng/mL	▲		▲		▲	
T3 (Free) (Free T3)	pg/mL	2.78	2.11 – 3.45	6.95	5.49 – 8.41	10.6	8.43 – 12.7
T3 (Total) (Total T3)	ng/mL	0.990	0.703 – 1.28	2.16	1.69 – 2.64	3.45	2.77 – 4.13

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
BECKMAN COULTER ACCESS / 2 / 2i (continued)							
T3 Uptake/T Uptake	% Uptake	46.1	37.4 – 54.7	53.3	43.5 – 63.0	57.7	47.4 – 68.0
T4 (Free) (Free T4)	ng/dL	1.09	0.874 – 1.30	2.86	2.33 – 3.39	4.04	3.30 – 4.79
T4 (Total) (Total T4)	µg/dL	6.10	4.32 – 7.89	11.5	8.62 – 14.3	15.1	11.5 – 18.7
Testosterone	ng/mL	1.19	0.911 – 1.47	3.93	3.16 – 4.69	8.30	6.76 – 9.83
Thyroid Stimulating Hormone (TSH) (3rd IS)	µIU/mL	0.430	0.346 – 0.515	5.74	4.48 – 6.99	32.6	25.4 – 39.8
Thyroid Stimulating Hormone (TSH) (hTSH, HYPERsensitive)	µIU/mL	\$		\$		\$	
Vitamin B12	pg/mL	267	201 – 332	459	350 – 569	687	525 – 848
BECKMAN COULTER AU SYSTEMS							
Acetaminophen	µg/mL	11.1	<10.0 – 14.1	34.6	27.6 – 41.5	121	101 – 141
Carbamazepine	µg/mL	2.63	<2.00 – 3.53	8.20	6.19 – 10.2	13.6	10.5 – 16.6
Digoxin	ng/mL	0.706	0.434 – 0.979	2.04	1.51 – 2.57	3.50	2.72 – 4.28
Ferritin	ng/mL	70.0	53.5 – 86.5	150	127 – 172	306	271 – 342
Gentamicin	µg/mL	2.42	1.85 – 2.98	4.90	3.78 – 6.02	8.20	6.35 – 10.0
Immunoglobulin A (IgA)	mg/dL	175	149 – 201	153	129 – 178	153	128 – 177
Immunoglobulin G (IgG)	mg/dL	814	678 – 950	712	597 – 827	703	589 – 816
Immunoglobulin M (IgM)	mg/dL	67.0	50.3 – 83.7	61.2	45.6 – 76.7	57.0	42.2 – 71.8
Lithium	mEq/L	0.468	0.313 – 0.622	1.18	0.977 – 1.38	1.77	1.53 – 2.01
Phenobarbital	µg/mL	9.10	6.78 – 11.4	24.2	19.0 – 29.4	48.3	38.5 – 58.1
Phenytoin	µg/mL	6.63	4.82 – 8.44	13.6	9.73 – 17.4	26.0	18.6 – 33.3
Salicylate	mg/dL	3.88	2.65 – 5.11	15.3	12.4 – 18.3	43.0	35.8 – 50.2
T4 (Total) (DRI)	µg/dL	6.48	5.15 – 7.81	11.8	10.1 – 13.4	13.4	11.6 – 15.1
Theophylline	µg/mL	4.47	3.51 – 5.43	15.2	10.8 – 19.6	29.6	20.6 – 38.5
Tobramycin	µg/mL	0.940	0.664 – 1.22	2.66	2.23 – 3.09	5.84	5.11 – 6.57
Valproic Acid	µg/mL	35.8	27.3 – 44.4	83.7	68.6 – 98.8	118	97.7 – 137
Vancomycin	µg/mL	6.15	4.00 – 8.30	15.1	11.7 – 18.5	27.6	22.3 – 32.8
BECKMAN COULTER SYNCHRON / UniCel DxS SERIES							
Acetaminophen	µg/mL	13.5	<10.0 – 19.5	38.1	29.7 – 46.5	121	104 – 138
Carbamazepine	µg/mL	2.08	<2.00 – 2.74	7.23	5.93 – 8.54	12.2	10.3 – 14.1
Digoxin	ng/mL	0.782	0.392 – 1.17	2.12	1.60 – 2.64	3.67	3.02 – 4.32
Gentamicin	µg/mL	▲		▲		▲	
Iron	µg/dL	114	97.2 – 131	75.2	58.6 – 91.8	76.0	59.4 – 92.6
Lithium (Infinity)	mEq/L	0.435	0.280 – 0.590	1.25	1.04 – 1.45	1.86	1.61 – 2.11
Phenobarbital	µg/mL	8.81	6.84 – 10.8	23.8	19.7 – 28.0	45.9	38.5 – 53.3
Phenytoin	µg/mL	7.09	5.94 – 8.24	14.1	11.9 – 16.3	23.7	20.1 – 27.2
Salicylate	mg/dL		<4.00 – 6.03	16.2	13.7 – 18.8	44.6	39.8 – 49.3
Theophylline	µg/mL	4.12	3.46 – 4.78	14.6	12.6 – 16.5	27.1	23.5 – 30.6
Tobramycin	µg/mL	1.08	0.619 – 1.55	3.70	3.07 – 4.33	7.25	6.37 – 8.13
Valproic Acid	µg/mL	32.0	18.7 – 45.3	80.8	65.3 – 96.2	109	91.9 – 125
Vancomycin	µg/mL	6.45	4.46 – 8.44	17.7	14.3 – 21.1	36.5	30.6 – >40.0
BECKMAN COULTER UniCel Dxi							
AFP	ng/mL	17.7	12.9 – 22.4	97.6	71.8 – 123	208	153 – 263
CEA (CEA2)	ng/mL	2.13	1.60 – 2.66	21.7	16.5 – 26.9	43.5	33.1 – 53.8
Cortisol	µg/dL	2.62	1.65 – 3.59	18.3	13.9 – 22.6	28.3	21.7 – 34.8
C-Peptide (2)	ng/mL	1.20	0.840 – 1.56	3.71	2.60 – 4.82	6.16	4.31 – 8.01
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEA-S)	µg/dL	65.2	47.4 – 82.9	149	111 – 187	471	354 – 588
Digoxin	ng/mL	0.823	0.602 – 1.04	2.17	1.75 – 2.59	3.55	2.92 – 4.17
Estradiol (Sensitive)	pg/mL	96.3	49.5 – 143	242	155 – 329	385	258 – 512
Estriol (Free) (Unconjugated Estriol)	ng/mL	1.37	0.934 – 1.80	4.00	3.09 – 4.90	>6.90	
Ferritin	ng/mL	51.6	39.8 – 63.4	159	120 – 198	375	284 – 466
Folate (FOLW)	ng/mL	4.26	3.19 – 5.33	10.1	7.88 – 12.2	17.5	13.9 – 21.1
Follicle Stimulating Hormone (FSH) (hFSH)	mIU/mL	9.34	7.04 – 11.6	27.2	20.7 – 33.7	47.8	36.4 – 59.3
hCG (Total hCG) (5th IS)	mIU/mL	6.45	5.09 – 7.80	25.7	20.7 – 30.6	245	199 – 290
Insulin (Ultrasensitive Insulin)	µIU/mL	14.5	11.6 – 17.4	52.2	42.1 – 62.3	158	127 – 188
Luteinizing Hormone (LH) (hLH)	mIU/mL	1.23	0.864 – 1.60	15.7	12.1 – 19.2	59.5	46.3 – 72.7
Progesterone	ng/mL	0.583	0.418 – 0.749	11.1	8.58 – 13.6	26.2	20.3 – 32.1

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
BECKMAN COULTER UniCel Dxl (continued)							
Progesterone (P4DE)	ng/mL	0.345	0.239 – 0.450	8.83	6.65 – 11.0	22.7	17.1 – 28.4
Prolactin	ng/mL	5.73	4.50 – 6.97	16.1	12.8 – 19.4	31.2	24.8 – 37.5
PSA (Free) (Hybritech free PSA)	ng/mL	0.462	0.347 – 0.576	2.18	1.74 – 2.63	15.1	12.2 – 18.0
PSA (Free) (WHO 96/668)	ng/mL	0.364	0.273 – 0.453	1.77	1.37 – 2.13	11.9	9.60 – 14.2
PSA (Total) (Hybritech PSA)	ng/mL	0.831	0.651 – 1.01	3.72	2.99 – 4.46	24.3	19.6 – 28.9
PSA (Total) (WHO 96/670)	ng/mL	0.702	0.550 – 0.853	2.90	2.33 – 3.47	18.9	15.3 – 22.5
T3 (Free) (Free T3)	pg/mL	2.40	1.70 – 3.10	5.80	3.91 – 7.68	8.59	5.68 – 11.5
T3 (Total) (Total T3)	ng/mL	0.945	0.664 – 1.23	2.21	1.72 – 2.70	3.57	2.89 – 4.25
T3 Uptake/T Uptake	% Uptake	43.9	35.9 – 51.9	50.2	41.3 – 59.1	53.3	44.0 – 62.6
T4 (Free) (Free T4)	ng/dL	0.897	0.681 – 1.11	2.70	2.14 – 3.26	4.04	3.21 – 4.87
T4 (Total) (Total T4)	µg/dL	6.25	4.43 – 8.07	10.9	8.19 – 13.5	14.5	11.2 – 17.9
Testosterone	ng/mL	1.18	0.919 – 1.45	3.52	2.74 – 4.29	7.40	5.77 – 9.02
Thyroid Stimulating Hormone (TSH) (3rd IS)	µIU/mL	0.425	0.360 – 0.489	5.67	4.31 – 7.03	31.9	24.0 – 39.8
Thyroid Stimulating Hormone (TSH) (hTSH, HYPERsensitive)	µIU/mL	0.452	0.385 – 0.518	6.35	4.82 – 7.87	35.0	26.3 – 43.6
Vitamin B12	pg/mL	243	173 – 313	440	324 – 556	648	483 – 813
BIOMÉRIEUX VIDAS							
AFP	ng/mL	18.1	12.1 – 24.2	109	75.1 – 143	243	171 – 314
CEA (S)	ng/mL	1.54	1.09 – 1.99	10.5	7.88 – 13.2	16.1	12.1 – 20.2
Digoxin	ng/mL	0.557	0.309 – 0.805	1.97	1.45 – 2.49	3.35	2.56 – 4.14
Estradiol (II)	pg/mL	103	72.8 – 133	394	311 – 477	900	741 – 1058
Ferritin	ng/mL	60.4	39.9 – 80.9	149	97.0 – 201	339	219 – 459
Follicle Stimulating Hormone (FSH)	mIU/mL	7.88	6.15 – 9.60	23.3	18.3 – 28.4	46.7	36.7 – 56.8
hCG	mIU/mL	5.77	3.82 – 7.71	22.2	15.8 – 28.6	299	216 – 382
Immunoglobulin E (IgE) (Total)	IU/mL	301	167 – 434	83.2	52.3 – 114	97.1	59.7 – 134
Luteinizing Hormone (LH)	mIU/mL	1.37	1.11 – 1.62	14.1	11.3 – 17.0	56.5	44.8 – 68.3
Progesterone	ng/mL	0.673	<0.250 – 1.10	16.1	11.7 – 20.5	44.0	32.5 – 55.6
Prolactin	ng/mL	5.85	3.54 – 8.16	18.2	13.1 – 23.3	35.2	26.3 – 44.2
PSA (Total)	ng/mL	0.832	0.563 – 1.10	3.70	2.73 – 4.67	22.8	17.1 – 28.4
T3 (Free)	pg/mL	2.43	1.59 – 3.28	8.51	6.28 – 10.7	14.2	10.7 – 17.8
T3 (Total)	ng/mL	0.778	0.513 – 1.04	2.23	1.67 – 2.80	3.30	2.52 – 4.09
T4 (Free) (FT4N) (30459)	ng/dL	1.03	0.692 – 1.37	3.24	2.49 – 3.99	5.04	3.94 – 6.14
T4 (Total)	µg/dL	6.42	4.87 – 7.96	12.5	9.80 – 15.2	15.7	12.4 – 19.0
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.443	0.282 – 0.604	6.87	5.33 – 8.40	39.2	30.7 – 47.6
DIASORIN LIAISON (2)							
Aldosterone	ng/dL	10.8	7.58 – 14.1	25.2	17.6 – 32.8	61.3	42.9 – 79.8
CEA	ng/mL	2.37	1.91 – 2.84	18.2	15.0 – 21.4	39.2	32.1 – 46.3
Cortisol	µg/dL	1.85	1.37 – 2.33	19.6	16.5 – 22.7	32.0	27.2 – 36.8
C-Peptide	ng/mL	1.52	0.716 – 2.32	4.87	3.04 – 6.70	7.90	4.51 – 11.3
Estradiol (II Gen) (310680)	pg/mL	80.9	54.2 – 108	215	150 – 279	340	238 – 441
Follicle Stimulating Hormone (FSH) (US only)	mIU/mL	8.94	7.15 – 10.7	27.9	22.3 – 33.5	62.5	50.0 – 75.0
Luteinizing Hormone (LH) (US only)	mIU/mL	1.84	0.766 – 2.91	22.3	16.4 – 28.2	93.7	75.8 – 112
Progesterone (II Gen) (310690)	ng/mL	0.680	0.270 – 1.09	10.3	7.20 – 13.4	23.2	16.3 – 30.2
Prolactin (xt)	µIU/mL	155	109 – 201	449	330 – 568	963	737 – 1190
T3 (Free)	pg/mL	2.75	2.34 – 3.16	11.7	9.46 – 13.9	22.0	18.5 – 25.5
T4 (Free) (US only)	ng/dL	1.14	0.969 – 1.31	3.50	2.98 – 4.03	6.20	5.27 – 7.13
Testosterone	ng/mL	0.670	0.430 – 0.910	2.17	1.52 – 2.82	4.64	3.25 – 6.03
DIASORIN LIAISON XL (2)							
Aldosterone	ng/dL	11.7	8.19 – 15.2	27.1	19.0 – 35.2	66.1	46.3 – 85.9
CEA	ng/mL	2.66	2.18 – 3.14	20.1	16.0 – 24.2	42.7	33.4 – 52.0
Cortisol	µg/dL	1.31	1.11 – 1.51	17.6	14.5 – 20.7	32.2	26.9 – 37.5
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEA-Sulfate)	µg/dL	63.4	35.5 – 91.3	146	102 – 190	530	246 – >750
Estradiol (II Gen) (310680)	pg/mL	82.0	54.9 – 109	209	147 – 272	340	238 – 442
Follicle Stimulating Hormone (FSH) (US only)	mIU/mL	9.47	7.57 – 11.4	30.4	24.3 – 36.5	64.7	51.7 – 77.7
hCG (XL hCG) (REF 312321)	mIU/mL	6.70	4.04 – 9.36	27.1	23.0 – 31.2	232	197 – 267
Luteinizing Hormone (LH) (US Only)	mIU/mL	2.14	1.65 – 2.63	24.0	20.4 – 27.6	103	87.6 – 118

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
DIASORIN LIAISON XL (2) (continued)							
Progesterone (Il Gen) (310690)	ng/mL	0.560	0.230 – 0.900	10.1	7.08 – 13.1	23.2	16.3 – 30.2
Prolactin (xt)	µIU/mL	171	137 – 205	466	373 – 559	984	787 – 1180
T3 (Free)	pg/mL	2.88	2.45 – 3.31	11.9	10.1 – 13.7	21.5	18.3 – 24.7
T4 (Free) (US only)	ng/dL	1.08	0.918 – 1.24	3.76	3.20 – 4.32	7.14	6.07 – >7.70
T4 (Total)	µg/dL	3.84	3.07 – 4.61	6.21	4.97 – 7.45	8.26	6.35 – 10.2
Testosterone	ng/mL	0.470	0.300 – 0.630	1.63	1.14 – 2.11	3.56	2.49 – 4.63
Testosterone XT	ng/mL	0.605	0.387 – 0.822	2.51	1.76 – 3.26	5.41	3.79 – 7.03
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.622	0.529 – 0.715	7.33	6.23 – 8.43	40.9	34.8 – 47.1
IDS-iSYS (2)							
Human Growth Hormone (hGH) (IS-3700)	ng/mL	3.06	2.23 – 3.88	8.55	6.50 – 10.6	15.3	12.1 – 18.5
ORTHO VITROS MICROSLIDE SERIES							
Acetaminophen (ACET)	µg/mL	11.6	<10.0 – 13.5	41.4	34.7 – 48.0	139	121 – 157
Carbamazepine (CRBM)	µg/mL	<3.00		6.39	4.89 – 7.88	11.1	8.76 – 13.4
Digoxin (DGXN)	ng/mL	0.765	0.542 – 0.988	1.97	1.56 – 2.38	3.28	2.66 – 3.89
Iron (Fe)	µg/dL	118	103 – 133	74.5	59.4 – 89.5	70.0	55.0 – 85.1
Lithium (Li)	mmol/L	0.726	0.537 – 0.916	1.69	1.45 – 1.92	2.42	2.15 – 2.69
Phenytoin (PHYT)	µg/mL	5.62	4.42 – 6.81	12.4	9.91 – 14.8	23.3	18.8 – 27.8
Salicylate (SALI)	mg/dL	5.13	3.47 – 6.79	18.2	15.9 – 20.6	38.2	34.7 – >40.0
Theophylline (THEO)	µg/mL	4.12	2.30 – 5.94	15.2	12.1 – 18.2	31.0	26.1 – 35.8
ORTHO VITROS MICROTIP SERIES							
Gentamicin (GENT)	µg/mL	2.32	1.92 – 2.72	4.52	3.65 – 5.38	7.23	5.79 – 8.67
Tobramycin (TOBRA)	µg/mL	1.08	0.872 – 1.29	2.88	2.42 – 3.34	6.19	5.25 – 7.14
Valproic Acid (VALP)	µg/mL	33.5	22.1 – 44.9	76.7	58.7 – 94.7	107	84.4 – 130
Vancomycin (VANC)	µg/mL	5.74	<5.00 – 7.33	14.2	11.6 – 16.9	27.0	22.7 – 31.3
ORTHO VITROS MICROWELL SERIES							
AFP (2) (3)	IU/mL	12.8	9.96 – 15.6	74.0	57.8 – 90.2	151	114 – 188
CEA	ng/mL	2.17	1.71 – 2.62	19.5	16.5 – 22.6	39.9	33.8 – 46.0
Cortisol (Cort)	µg/dL	2.53	1.95 – 3.11	18.2	14.6 – 21.9	28.0	22.4 – 33.5
C-Peptide (2)	ng/mL	1.49	1.12 – 1.86	4.91	3.69 – 6.13	7.79	5.83 – 9.75
Estradiol (E2) (2)	pg/mL	88.8	34.2 – 143	384	243 – 526	914	645 – 1183
Ferritin (Ferr)	ng/mL	51.0	39.0 – 63.0	134	104 – 164	319	248 – 389
Folate (2)	ng/mL	3.07	1.79 – 4.35	7.65	5.10 – 10.2	15.3	9.99 – >20.0
Folate (Fol/RCFol)	ng/mL	3.12	1.73 – 4.50	8.61	5.43 – 11.8	17.1	11.2 – >20.0
Follicle Stimulating Hormone (FSH) (2)	mIU/mL	5.94	4.46 – 7.42	21.0	17.0 – 25.0	40.6	31.8 – 49.4
hCG (B-hCG)	mIU/mL	▲		▲		▲	
Insulin (2) (3)	µIU/mL	16.1	10.2 – 22.0	58.9	40.9 – 76.9	177	123 – 231
Luteinizing Hormone (LH)	mIU/mL	0.957	0.503 – 1.41	17.0	14.1 – 19.9	57.0	47.9 – 66.0
Progesterone (Prog) (2)	ng/mL	0.528	0.291 – 0.767	10.2	7.61 – 12.8	27.5	21.1 – 33.6
Prolactin (Prol)	ng/mL	7.55	5.87 – 9.23	16.4	13.3 – 19.4	30.8	25.5 – 36.0
PSA (Total) (PSA) (680 1756)	ng/mL	0.593	0.479 – 0.707	2.37	1.93 – 2.80	13.1	10.7 – 15.5
T3 (Free) (FT3 II) (2)	pg/mL	4.77	3.67 – 5.87	17.0	12.4 – 21.6	>22.7	
T3 (Free) (FT3) (2)	pg/mL	5.08	3.69 – 6.47	20.0	1.80 – >22.7	>22.7	
T3 (Total) (TT3)	nmol/L	1.48	1.22 – 1.75	3.61	2.98 – 4.24	6.04	5.33 – 6.75
T3 Uptake/T Uptake (T3U)	% Uptake	39.5	34.3 – 44.7	56.2	48.7 – 63.7		56.3 – >65.0
T4 (Free) (FT4)	ng/dL	1.68	1.36 – 2.00	6.49	5.60 – >6.98	>6.98	
T4 (Total) (TT4) (2)	µg/dL	5.74	4.65 – 6.82	10.9	8.99 – 12.9	14.4	11.9 – 16.9
Testosterone (2)	ng/dL	107	67.7 – 146	478	331 – 625	1202	859 – 1545
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.269	0.207 – 0.332	5.05	4.16 – 5.93	29.9	24.7 – 35.1
Vitamin B12	pg/mL	363	280 – 446	617	462 – 772	792	587 – 997
PerkinElmer AUTODELFIA (2)							
hCG	mIU/mL	<10.0		21.3	16.0 – 27.0	297	238 – 356
T3 (Total)	ng/mL	\$		\$		\$	
T4 (Free)	ng/dL	\$		\$		\$	
T4 (Total)	µg/dL	\$		\$		\$	
Thyroid Stimulating Hormone (TSH) (hTSH Ultra)	µIU/mL	0.440	0.350 – 0.530	5.56	4.40 – 6.70	34.6	28.0 – 42.0

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
ROCHE / HITACHI COBAS C SYSTEMS							
Acetaminophen (ACET2) (REF 06769942190)	µg/mL	10.6	8.39 – 12.8	33.5	28.2 – 38.8	105	89.6 – 120
Amikacin	µg/mL	4.35	3.26 – 5.44	14.2	12.4 – 15.9	26.9	24.3 – 29.5
Carbamazepine (CARB4)	µg/mL	2.76	2.07 – 3.45	8.33	6.95 – 9.71	13.7	11.6 – 15.7
Digoxin	ng/mL	0.862	0.566 – 1.16	2.03	1.63 – 2.42	3.36	2.85 – 3.87
Ferritin	ng/mL	81.5	66.8 – 96.3	171	131 – 211	353	262 – 444
Gentamicin (QMS)	µg/mL	2.47	1.72 – 3.21	5.30	4.19 – 6.41	8.12	6.65 – 9.58
Iron	µg/dL	115	93.3 – 137	79.5	57.7 – 101	81.2	59.4 – 103
Iron (TIBC)	µg/dL	275	241 – 308	234	203 – 266	238	206 – 269
Lithium	mg/dL	0.328	0.207 – 0.448	0.886	0.742 – 1.03	1.32	1.15 – 1.49
Phenobarbital	µg/mL	8.98	6.92 – 11.0	23.9	20.2 – 27.6	47.0	40.8 – 53.3
Phenytoin	µg/mL	6.38	4.86 – 7.91	13.7	11.1 – 16.4	24.5	20.2 – 28.9
Salicylate	mg/dL	4.01	3.41 – 4.62	15.7	14.0 – 17.4	44.3	39.9 – 48.6
Theophylline	µg/mL	4.58	3.71 – 5.46	15.6	13.4 – 17.7	28.4	24.7 – 32.0
Tobramycin	µg/mL	0.937	0.657 – 1.22	2.72	2.27 – 3.16	5.78	5.04 – 6.51
Valproic Acid	µg/mL	32.1	24.4 – 39.8	76.9	61.6 – 92.1	110	89.3 – 131
Vancomycin (VANC3)	µg/mL	7.87	5.58 – 10.2	19.8	15.9 – 23.8	35.0	29.3 – 40.8
ROCHE COBAS INTEGRA							
Acetaminophen (ACET2)	µg/mL	\$		\$		\$	
Carbamazepine	µg/mL	\$		\$		\$	
Gentamicin	µg/mL	\$		\$		\$	
Lithium	mEq/L	\$		\$		\$	
Phenobarbital	µg/mL	\$		\$		\$	
Phenytoin	µg/mL	\$		\$		\$	
Theophylline	µg/mL	\$		\$		\$	
Valproic Acid	µg/mL	\$		\$		\$	
Vancomycin	µg/mL	\$		\$		\$	
ROCHE ELECSYS / E170 / COBAS e SYSTEMS							
ACTH	pg/mL	24.4	8.25 – 40.5	79.6	38.6 – 121	156	80.1 – 231
AFP	ng/mL	17.0	12.8 – 21.2	101	78.5 – 123	217	169 – 264
Calcitonin	pg/mL	37.5	21.1 – 53.9	202	148 – 255	429	323 – 536
CEA	ng/mL	2.39	1.84 – 2.94	17.7	14.6 – 20.7	33.7	28.0 – 39.5
Cortisol (II)	µg/dL	2.98	2.28 – 3.68	17.3	13.9 – 20.8	26.3	21.2 – 31.4
C-Peptide	ng/mL	1.73	1.35 – 2.11	5.28	4.32 – 6.24	8.08	6.67 – 9.49
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEA-Sulfate)	µg/dL	99.1	75.6 – 123	217	171 – 263	776	621 – 931
Digoxin	ng/mL	0.731	0.548 – 0.913	2.05	1.70 – 2.40	3.51	2.97 – 4.05
Estradiol (III)	pg/mL	91.1	68.6 – 114	228	191 – 265	395	340 – 449
Ferritin	ng/mL	80.0	64.9 – 95.1	204	165 – 244	437	351 – 523
Folate (cobas e801/e402)	ng/mL	3.25	<2.00 – 4.50	7.65	5.56 – 9.74	14.5	11.1 – 17.8
Folate (III) (E170/e601/e602/e411) restand.	ng/mL	3.01	<2.00 – 4.23	6.87	4.91 – 8.83	12.3	9.29 – 15.3
Follicle Stimulating Hormone (FSH)	mIU/mL	7.47	6.16 – 8.78	20.2	16.7 – 23.8	38.7	31.9 – 45.5
hCG (+ B)	mIU/mL	4.92	3.77 – 6.06	20.1	16.4 – 23.8	223	185 – 260
hCG (STAT)	mIU/mL	4.44	3.37 – 5.50	19.3	15.8 – 22.9	203	169 – 238
Human Growth Hormone (hGH)	ng/mL	3.35	1.87 – 4.84	8.81	7.04 – 10.6	15.7	13.4 – 18.1
Immunoglobulin E (IgE)	ng/mL	834	670 – 998	250	156 – 345	282	184 – 379
Insulin	µIU/mL	16.8	13.7 – 19.8	63.1	53.1 – 73.1	188	160 – 217
Luteinizing Hormone (LH)	mIU/mL	2.10	1.66 – 2.55	20.3	17.3 – 23.4	67.0	57.2 – 76.9
Progesterone (III)	ng/mL	0.647	0.343 – 0.951	11.7	9.69 – 13.7	27.6	23.1 – 32.0
Prolactin	ng/mL	8.77	7.33 – 10.2	24.0	20.1 – 27.9	51.2	42.9 – 59.5
Prostate Specific Antigen, Free (fPSA) (Cobas e411/e601/602)	ng/mL	0.335	0.275 – 0.394	1.67	1.42 – 1.92	10.9	9.34 – 12.5
Prostate Specific Antigen, Free (fPSA) (Cobas e801/e402)	ng/mL	0.329	0.274 – 0.385	1.64	1.38 – 1.90	10.5	8.84 – 12.2
Prostate Specific Antigen, Total (e411/e601/602) (tPSA)	ng/mL	0.691	0.568 – 0.814	3.26	2.74 – 3.77	20.4	17.2 – 23.6
Prostate specific Antigen, Total (tPSA) (Cobas e801/e402)	ng/mL	0.671	0.547 – 0.794	3.14	2.63 – 3.64	19.5	16.5 – 22.6
T3 Total	ng/mL	1.04	0.787 – 1.29	2.46	1.94 – 2.98	3.66	2.91 – 4.41
T3 Uptake/T-Uptake	TBI	0.966	0.836 – 1.10	0.591	0.419 – 0.763	0.338	<0.200 – 0.538
T3 (Free) (III)	pg/mL	3.16	2.60 – 3.73	9.79	8.42 – 11.2	16.8	14.7 – 18.8

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
ROCHE ELECSYS / E170 / COBAS e SYSTEMS (continued)							
T4 Total	µg/dL	5.98	4.70 – 7.26	10.4	8.22 – 12.5	13.2	10.4 – 15.9
T4 (Free) (II)	ng/dL	1.14	1.01 – 1.27	2.99	2.44 – 3.53	4.92	3.94 – 5.90
T4 (Free) (III)	ng/dL	1.22	1.07 – 1.37	3.25	2.65 – 3.85	5.50	4.40 – 6.59
Testosterone (II)	ng/mL	1.55	1.15 – 1.95	4.17	3.35 – 4.99	8.79	7.23 – 10.4
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.517	0.352 – 0.683	6.36	5.02 – 7.71	36.7	29.2 – 44.1
Vitamin B12 (II) (E170/e601/e602/e411)	pg/mL	413	324 – 502	624	512 – 737	869	729 – 1008
Vitamin B12 (II) (cobas e801/e402)	pg/mL	382	296 – 467	607	496 – 717	824	689 – 959
ROCHE HITACHI / MODULAR							
Iron	µg/dL	115	93.3 – 137	79.5	57.7 – 101	81.2	59.4 – 103
Phenobarbital	µg/mL	8.98	6.92 – 11.0	23.9	20.2 – 27.6	47.0	40.8 – 53.3
Phenytoin	µg/mL	6.38	4.86 – 7.91	13.7	11.1 – 16.4	24.5	20.2 – 28.9
Theophylline	µg/mL	4.58	3.71 – 5.46	15.6	13.4 – 17.7	28.4	24.7 – 32.0
Tobramycin	µg/mL	0.937	0.657 – 1.22	2.72	2.27 – 3.16	5.78	5.04 – 6.51
Valproic Acid	µg/mL	32.1	24.4 – 39.8	76.9	61.6 – 92.1	110	89.3 – 131
SIEMENS ADVIA CENTAUR CP							
AFP	ng/mL	17.4	12.8 – 22.0	100	77.0 – 123	213	165 – 262
Androstenedione	ng/mL	0.579	0.312 – 0.846	1.33	0.804 – 1.85	2.65	1.67 – 3.63
Carbamazepine (CARB)	µg/mL	2.77	1.85 – 3.69	8.37	6.33 – 10.4	13.7	10.6 – 16.8
CEA	ng/mL	2.05	1.06 – 3.04	20.2	15.0 – 25.4	42.2	31.9 – 52.4
Cortisol (COR)	µg/dL	2.78	1.57 – 3.99	20.2	14.3 – 26.0	30.7	22.1 – 39.3
C-Peptide (CpS)	ng/mL	\$		\$		\$	
C-Peptide (CpS) (Rgt lots 206 & calibrator lot 08 & higher)	ng/mL	1.31	0.855 – 1.77	4.25	3.15 – 5.35	6.55	4.94 – 8.15
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEAS)	µg/dL	62.9	45.8 – 80.1	138	103 – 174	479	360 – 598
Digoxin (DIG)	ng/mL	0.750	0.566 – 0.935	2.24	1.80 – 2.67	3.91	3.20 – 4.62
Estradiol (eE2)	pg/mL	81.5	48.9 – 114	311	231 – 391	693	532 – 854
Ferritin (FER)	ng/mL	52.3	36.3 – 68.3	151	105 – 198	382	264 – 500
Folate (FOL)	ng/mL	3.49	1.98 – 4.99	7.17	4.15 – 10.2	12.9	7.52 – 18.3
Follicle Stimulating Hormone (FSH)	mIU/mL	7.95	5.61 – 10.3	22.7	17.0 – 28.4	44.9	34.1 – 55.8
Gentamicin (GENT)	µg/mL	2.02	1.37 – 2.66	4.31	2.98 – 5.64	7.27	4.90 – 9.64
hCG (ThCG)	mIU/mL	7.06	4.54 – 9.58	25.3	19.3 – 31.2	220	182 – 257
Immunoglobulin E (IgE) (tIgE)	IU/mL	361	254 – 467	93.2	63.5 – 123	100	68.7 – 132
Insulin (IRI)	µIU/mL	18.4	12.5 – 24.4	64.0	46.8 – 81.2	192	143 – 242
Luteinizing Hormone (LH)	mIU/mL	1.54	0.994 – 2.08	16.3	12.7 – 19.8	58.6	46.3 – 70.9
Phenobarbital (PHNB)	µg/mL	11.6	8.14 – 15.0	29.5	19.9 – 39.1	63.4	43.3 – >80.0
Phenytoin (PHTN)	µg/mL	7.88	5.63 – 10.1	15.6	11.0 – 20.1	28.7	20.1 – 37.4
Progesterone (PRGE)	ng/mL	0.854	0.391 – 1.32	10.8	8.11 – 13.4	21.1	16.1 – 26.0
Prolactin (PRL)	ng/mL	5.90	4.47 – 7.34	14.7	10.8 – 18.5	30.4	22.2 – 38.5
PSA (Total) (PSA)	ng/mL	0.643	0.496 – 0.790	3.13	2.45 – 3.81	20.6	16.2 – 25.0
PSA, Complexed (cPSA)	ng/mL	0.267	0.190 – 0.343	1.19	0.853 – 1.52	7.43	5.29 – 9.56
T3 (Free) (FT3)	pg/mL	3.01	2.57 – 3.45	9.06	7.75 – 10.4	14.9	12.8 – 17.0
T3 (Total) (T3)	ng/mL	0.961	0.679 – 1.24	2.55	1.84 – 3.25	4.15	3.00 – 5.29
T3 Uptake/T Uptake (TUp)	T Uptake Unit	1.23	1.01 – 1.46	1.69	1.39 – 1.99	1.86	1.53 – 2.19
T4 (Free) (FT4)	ng/dL	0.947	0.768 – 1.13	2.25	1.85 – 2.66	3.39	2.78 – 3.99
T4 (Total) (T4)	µg/dL	6.27	4.60 – 7.93	13.2	10.0 – 16.3	17.1	13.1 – 21.1
Testosterone II (TSTII)	ng/dL	157	94.6 – 220	405	284 – 526	745	543 – 947
Theophylline (THEO2)	µg/mL	4.40	3.36 – 5.44	15.0	12.1 – 17.9	27.4	22.3 – 32.5
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.474	0.384 – 0.563	6.43	5.07 – 7.79	42.2	34.1 – 50.3
Thyroid Stimulating Hormone (TSH) (TSH3-UL)	µIU/mL	0.397	0.323 – 0.470	5.39	4.25 – 6.53	32.7	25.8 – 39.6
Valproic Acid (VALP)	µg/mL	36.2	28.3 – 44.1	85.3	68.6 – 102	114	92.2 – 136
Vancomycin (VANC)	µg/mL	5.47	3.16 – 7.78	13.7	9.91 – 17.6	24.8	18.9 – 30.6
Vitamin B12 (VB12)	pg/mL	370	252 – 487	598	434 – 762	837	624 – 1050
SIEMENS ADVIA CENTAUR SYSTEMS							
AFP	ng/mL	18.0	13.7 – 22.2	96.3	77.2 – 115	212	171 – 253
Androstenedione	ng/mL	0.574	0.308 – 0.839	1.22	0.730 – 1.70	2.39	1.50 – 3.28
Carbamazepine (CARB)	µg/mL	2.73	1.75 – 3.71	7.65	5.18 – 10.1	13.5	9.26 – 17.8

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
SIEMENS ADVIA CENTAUR SYSTEMS (continued)							
CEA	ng/mL	2.02	1.25 – 2.78	20.1	15.9 – 24.3	40.6	32.6 – 48.7
Cortisol (COR)	µg/dL	2.72	1.85 – 3.58	19.8	14.6 – 25.1	30.7	22.6 – 38.7
C-Peptide (CpS)	ng/mL	\$		\$		\$	
C-Peptide (CpS) (Rgt lots 206 & calibrator lot 08 & higher)	ng/mL	1.43	0.900 – 1.95	4.43	3.09 – 5.77	6.93	4.92 – 8.94
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEAS)	µg/dL	66.8	41.6 – 91.9	142	96.4 – 187	461	329 – 593
Digoxin (DIG)	ng/mL	0.897	0.641 – 1.15	2.26	1.78 – 2.74	3.76	3.03 – 4.48
Estradiol (eE2)	pg/mL	89.5	64.6 – 114	320	261 – 378	706	591 – 820
Ferritin (FER)	ng/mL	52.5	41.1 – 63.8	156	119 – 193	375	283 – 467
Folate (FOL)	ng/mL	2.38	1.18 – 3.58	5.67	3.31 – 8.03	10.4	6.36 – 14.4
Follicle Stimulating Hormone (FSH)	mIU/mL	8.27	6.56 – 9.99	23.4	18.9 – 27.9	45.2	36.7 – 53.7
Gentamicin (GENT)	µg/mL	2.13	1.58 – 2.68	4.71	3.44 – 5.98	7.72	5.61 – 9.84
hCG (ThCG)	mIU/mL	7.26	4.05 – 10.5	27.4	21.1 – 33.6	235	198 – 271
Immunoglobulin E (IgE) (tIgE)	IU/mL	362	280 – 443	96.2	76.8 – 116	108	85.6 – 130
Insulin (IRI)	µIU/mL	19.7	14.6 – 24.8	67.3	51.0 – 83.6	199	152 – 246
Luteinizing Hormone (LH)	mIU/mL	1.53	1.17 – 1.88	18.2	14.5 – 21.9	62.5	49.8 – 75.2
Phenobarbital (PHNB)	µg/mL	12.8	9.23 – 16.4	32.3	23.7 – 40.8	63.8	47.9 – 79.6
Phenytoin (PHTN)	µg/mL	7.17	5.15 – 9.19	14.8	10.9 – 18.7	27.2	20.2 – 34.2
Progesterone (PRGE)	ng/mL	0.721	0.287 – 1.15	10.5	7.87 – 13.1	20.6	15.7 – 25.5
Prolactin (PRL)	ng/mL	6.01	4.94 – 7.08	16.6	13.3 – 19.9	34.3	27.3 – 41.3
PSA (Total) (PSA)	ng/mL	0.712	0.596 – 0.827	3.20	2.61 – 3.79	20.1	16.4 – 23.9
PSA, Complexed (cPSA)	ng/mL	0.283	0.212 – 0.355	1.14	0.898 – 1.38	6.45	5.16 – 7.75
T3 (Free) (FT3)	pg/mL	3.05	2.25 – 3.84	8.53	6.47 – 10.6	14.1	10.9 – 17.3
T3 (Total) (T3)	ng/mL	0.941	0.662 – 1.22	2.43	1.90 – 2.96	3.82	3.05 – 4.59
T3 Uptake/T Uptake (TUp) (Unit)	T Uptake Unit	1.12	0.910 – 1.33	1.48	1.21 – 1.75	1.64	1.35 – 1.93
T4 (Free) (FT4)	ng/dL	0.926	0.706 – 1.15	2.23	1.74 – 2.71	3.22	2.53 – 3.91
T4 (Total) (T4)	µg/dL	6.39	4.83 – 7.94	12.6	9.62 – 15.5	15.7	12.0 – 19.3
Testosterone (TSTII)	ng/dL	161	108 – 213	377	258 – 496	728	502 – 955
Theophylline (THEO2)	µg/mL	4.71	2.97 – 6.45	16.1	11.9 – 20.3	28.4	21.5 – 35.2
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.523	0.345 – 0.700	7.07	5.30 – 8.84	40.3	30.9 – 49.7
Thyroid Stimulating Hormone (TSH) (TSH3-UL)	µIU/mL	0.441	0.248 – 0.634	5.85	3.73 – 7.98	34.2	21.9 – 46.4
Valproic Acid (VALP)	µg/mL	34.8	28.3 – 41.3	80.3	66.5 – 94.0	112	92.9 – 130
Vancomycin (VANC)	µg/mL	5.82	4.03 – 7.61	14.7	11.0 – 18.3	26.4	20.3 – 32.4
Vitamin B12 (VB12)	pg/mL	384	266 – 501	578	419 – 737	856	637 – 1074
SIEMENS ADVIA CHEMISTRY SYSTEMS							
Acetaminophen (ACET)	mg/dL	1.03	0.730 – 1.33	3.36	2.79 – 3.94	10.8	9.25 – 12.3
Carbamazepine (CARB_2)	µg/mL	▲		▲		▲	
Digoxin (DIG)	ng/mL	0.707	0.484 – 0.929	1.98	1.54 – 2.41	3.45	2.77 – 4.13
Ferritin (FRT)	ng/mL	60.9	51.4 – 70.3	138	119 – 156	288	251 – 325
Gentamicin (GENT_2)	µg/mL	2.30	1.67 – 2.93	4.52	3.59 – 5.45	6.77	5.49 – 8.04
Immunoglobulin A (IgA) (IGA_2)	mg/dL	190	156 – 225	159	127 – 191	159	127 – 191
Immunoglobulin G (IgG) (IGG_2)	mg/dL	▲		▲		▲	
Immunoglobulin M (IgM) (IGM_2)	mg/dL	▲		▲		▲	
Iron (IRON_2)	µg/dL	111	84.6 – 137	72.5	44.7 – 100	72.7	44.9 – 101
Lithium (LITH/LITH_2)	mEq/L	0.459	0.331 – 0.587	1.32	1.10 – 1.54	1.97	1.68 – 2.26
Phenobarbital (PHNB_2)	µg/mL	▲		▲		▲	
Phenytoin (PHNY_2)	µg/mL	5.50	3.51 – 7.49	12.3	8.57 – 16.0	20.7	14.6 – 26.9
Salicylate (SAL)	mg/dL	4.42	2.74 – 6.09	18.2	15.5 – 20.9	48.8	43.7 – 53.8
Theophylline (THEO_2)	µg/mL	▲		▲		▲	
Tobramycin (TOB_2)	µg/mL	▲		▲		▲	
Valproic Acid (VPA_2)	µg/mL	37.6	30.1 – 45.0	82.0	65.3 – 98.6	112	89.2 – 135
Vancomycin (VANC_2)	µg/mL	5.98	3.24 – 8.73	16.4	11.7 – 21.2	29.0	21.7 – 36.2
SIEMENS BN SERIES NEPHELOMETERS							
Immunoglobulin A (IgA)	mg/dL	194	168 – 219	159	135 – 184	158	134 – 181
Immunoglobulin E (IgE)	IU/mL	336	238 – 434	92.1	69.8 – 114	106	79.6 – 133
Immunoglobulin G (IgG)	mg/dL	897	712 – 1083	797	637 – 957	763	612 – 915

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
SIEMENS BN SERIES NEPHELOMETERS (continued)							
Immunoglobulin M (IgM)	mg/dL	81.0	61.1 – 101	72.6	55.3 – 89.9	65.6	50.4 – 80.8
SIEMENS DIMENSION SERIES							
Acetaminophen (ACTM)	µg/mL	13.2	9.84 – 16.6	40.9	32.9 – 48.9	124	105 – 144
Carbamazepine (CRBM)	µg/mL	2.45	1.88 – 3.02	7.18	6.03 – 8.34	12.0	10.2 – 13.7
Digoxin (DGNA)	ng/mL	0.777	0.559 – 0.994	2.14	1.80 – 2.47	3.40	2.96 – 3.85
Ferritin (FERR)	ng/mL	79.8	65.0 – 94.7	199	164 – 234	436	361 – 512
Folate (FOLA) (EXL LOCI MODULE) (RF644)	ng/mL	2.78	1.88 – 3.67	6.44	4.71 – 8.17	11.1	8.30 – 13.9
Gentamicin (GENT)	µg/mL	1.91	1.46 – 2.36	4.64	3.95 – 5.33	7.28	6.35 – 8.20
hCG	mIU/mL	7.65	5.73 – 9.57	21.4	17.4 – 25.5	275	231 – 319
Immunoglobulin A (IgA)	mg/dL	\$		\$		\$	
Immunoglobulin G (IgG)	mg/dL	\$		\$		\$	
Immunoglobulin M (IgM)	mg/dL	\$		\$		\$	
Iron	µg/dL	111	88.1 – 134	75.2	52.2 – 98.1	75.4	52.4 – 98.3
Iron (TIBC)	µg/dL	274	230 – 318	242	201 – 283	245	204 – 287
Lithium (LI)	mmol/L	0.413	0.256 – 0.570	1.20	1.01 – 1.40	1.83	1.60 – 2.05
Phenobarbital (PHNO)	µg/mL	8.98	5.51 – 12.5	25.0	19.4 – 30.6	50.6	41.6 – 59.5
Phenytoin (PTN)	µg/mL	6.48	4.63 – 8.33	14.6	11.7 – 17.4	26.3	22.0 – 30.6
PSA (Free) (FPSA)	ng/mL	▲		▲		▲	
PSA (Total) (TPSA)	ng/mL	0.683	0.478 – 0.887	3.13	2.50 – 3.77	20.8	17.0 – 24.5
Salicylate (SAL)	mg/dL	4.87	3.53 – 6.22	17.0	14.3 – 19.7	43.3	40.6 – 46.0
T3 (Free) (FT3)	pg/mL	2.47	1.99 – 2.94	9.93	8.51 – 11.3	17.7	15.6 – 19.9
T3 Uptake/T Uptake (% TU)	% Uptake	\$		\$		\$	
T4 (Free) (EXL LOCI Module)	ng/dL	1.03	0.801 – 1.25	2.63	2.18 – 3.07	5.35	4.52 – 6.18
T4 (Free) (Heterogeneous Module)	ng/dL	\$		\$		\$	
T4 (Total) (T4)	µg/dL	\$		\$		\$	
Theophylline (THEO)	µg/mL	4.63	3.67 – 5.60	17.1	14.0 – 20.1	32.4	26.9 – 37.9
Thyroid Stimulating Hormone (TSH)	µIU/mL	▲		▲		▲	
Thyroid Stimulating Hormone (TSH) (EXL LOCI Module) (TSHL)	µIU/mL	0.422	0.348 – 0.496	5.73	4.53 – 6.92	35.7	27.8 – 43.6
Tobramycin (TOBR)	µg/mL	0.617	0.253 – 0.981	2.30	1.78 – 2.82	5.15	4.37 – 5.93
Valproic Acid (VALP)	µg/mL	33.2	27.0 – 39.3	71.9	61.2 – 82.6	94.6	81.1 – 108
Vancomycin (VANC)	µg/mL	6.85	5.36 – 8.34	17.7	14.7 – 20.6	31.0	26.2 – 35.7
Vitamin B12 (VB12) (EXL LOCI MODULE) (RF642)	pg/mL	388	308 – 468	604	506 – 702	821	705 – 937
SIEMENS DIMENSION VISTA SYSTEMS							
Acetaminophen (ACTM)	µg/mL	14.0	10.4 – 17.5	42.2	36.8 – 47.7	126	115 – 137
AFP	ng/mL	17.2	14.2 – 20.1	98.4	85.8 – 111	211	185 – 237
Amikacin	µg/mL	4.67	3.89 – 5.45	13.7	10.9 – 16.5	24.0	18.3 – 29.7
Caffeine	µg/mL	2.07	1.31 – 2.83	6.95	5.11 – 8.78	14.8	11.2 – 18.3
Carbamazepine (CRBM)	µg/mL	▲		▲		▲	
CEA	ng/mL	1.96	1.67 – 2.26	19.7	17.4 – 21.9	39.4	34.9 – 43.8
Digoxin (DGXN)	ng/mL	0.799	0.620 – 0.978	2.10	1.72 – 2.49	3.64	3.04 – 4.23
Estradiol	pg/mL	86.4	65.8 – 107	264	229 – 299	512	456 – 567
Ferritin (FERR)	ng/mL	55.6	48.7 – 62.5	157	136 – 178	370	319 – 420
Folate (FOL)	ng/mL	2.40	1.61 – 3.19	5.45	4.12 – 6.79	9.76	7.65 – 11.9
Follicle Stimulating Hormone (FSH)	mIU/mL	▲		▲		▲	
Gentamicin (GENT)	µg/mL	▲		▲		▲	
hCG (Beta, BHCG)	mIU/mL	7.25	5.48 – 9.02	20.3	16.3 – 24.3	260	212 – 308
Immunoglobulin A (IgA)	mg/dL	191	166 – 217	158	134 – 182	159	135 – 183
Immunoglobulin E (IgE)	IU/mL	334	291 – 377	98.2	82.4 – 114	110	92.6 – 127
Immunoglobulin G (IgG)	mg/dL	855	746 – 964	727	629 – 824	721	623 – 818
Immunoglobulin M (IgM)	mg/dL	81.0	71.5 – 90.5	68.9	59.6 – 78.3	65.1	55.9 – 74.2
Iron	µg/dL	110	86.6 – 133	74.0	50.7 – 97.3	74.6	51.3 – 97.9
Iron (TIBC)	µg/dL	▲		▲		▲	
Lidocaine (LIDO)	µg/mL	1.44	1.14 – 1.73	3.74	3.22 – 4.26	7.80	6.88 – 8.71
Lithium (LITH)	mmol/L	0.470	0.284 – 0.656	1.21	0.992 – 1.42	1.82	1.57 – 2.06
Luteinizing Hormone (LH)	mIU/mL	1.60	1.25 – 1.94	20.9	18.9 – 22.8	78.3	71.4 – 85.1

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
SIEMENS DIMENSION VISTA SYSTEMS (continued)							
N-Acetyl Procainamide (NAPA)	µg/mL	1.59	1.04 – 2.13	4.19	3.39 – 4.98	8.80	7.42 – 10.2
Phenobarbital (PHNO)	µg/mL	10.2	7.22 – 13.1	26.3	22.0 – 30.5	49.3	43.2 – 55.4
Phenytoin (PTN)	µg/mL	7.35	5.76 – 8.94	14.8	12.3 – 17.2	26.4	22.5 – 30.2
Procainamide (PROC)	µg/mL	2.33	1.76 – 2.90	9.64	8.04 – 11.2	16.2	13.8 – 18.6
Progesterone (PROG)	ng/mL	0.781	0.512 – 1.05	9.58	8.35 – 10.8	22.4	19.6 – 25.3
Prolactin (PRL)	ng/mL	6.29	5.57 – 7.01	19.2	17.3 – 21.1	41.8	37.9 – 45.7
PSA (Free) (FPSA)	ng/mL	▲		▲		▲	
PSA (Total) (TPSA)	ng/mL	0.584	0.397 – 0.771	2.89	2.29 – 3.48	18.4	15.1 – 21.7
Salicylate (SAL)	mg/dL	4.93	4.14 – 5.71	16.3	14.4 – 18.3	43.0	38.4 – 47.7
T3 (Free) (FT3)	pg/mL	▲		▲		▲	
T3 Uptake/T Uptake (% TU)	% Uptake	35.5	29.5 – 41.4	42.5	35.0 – 50.0	45.4	37.3 – 53.6
T4 (Free) (FT4)	ng/dL	▲		▲		▲	
T4 (Total) (T4)	µg/dL	6.38	4.24 – 8.51	12.6	10.2 – 15.1	16.2	13.6 – 18.8
Theophylline (THEO)	µg/mL	4.75	3.85 – 5.65	15.3	12.9 – 17.7	27.1	23.1 – 31.1
Thyroid Stimulating Hormone (TSH)	µIU/mL	0.420	0.350 – 0.489	5.77	4.51 – 7.03	36.9	28.7 – 45.0
Tobramycin (TOBR)	µg/mL	0.638	0.350 – 0.925	2.69	2.18 – 3.20	6.10	5.22 – 6.98
Valproic Acid (VALP)	µg/mL	34.8	28.2 – 41.3	80.3	68.0 – 92.5	105	89.7 – 120
Vancomycin (VANC)	µg/mL	6.45	5.02 – 7.87	17.0	14.2 – 19.8	29.2	24.8 – 33.6
Vitamin B12 (VB12)	pg/mL	361	302 – 420	572	498 – 646	808	717 – 899
SIEMENS IMMULITE / IMMULITE 1000							
AFP	ng/mL	17.0	10.3 – 23.6	102	64.1 – 140	219	138 – 300
Androstenedione	ng/mL	1.23	0.610 – 1.84	3.45	2.06 – 4.83	7.01	4.38 – 9.63
CEA	ng/mL	2.43	1.32 – 3.55	24.4	18.1 – 30.8	48.7	36.5 – 60.8
Cortisol	µg/dL	2.29	1.10 – 3.48	16.8	11.9 – 21.7	24.9	17.8 – 32.0
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate)	µg/dL	63.2	39.0 – 87.4	130	84.6 – 176	506	339 – 672
Estradiol	pg/mL	89.3	54.7 – 124	286	198 – 374	602	427 – 776
Estriol (Free) (UE3)	ng/mL	1.36	0.671 – 2.06	5.19	3.44 – 6.93	>11.2	
Ferritin	ng/mL	63.6	48.5 – 78.7	151	109 – 192	335	238 – 432
Follicle Stimulating Hormone (FSH)	mIU/mL	8.41	6.71 – 10.1	23.2	18.4 – 28.1	43.1	34.0 – 52.2
hCG	mIU/mL	7.50	3.68 – 11.3	21.9	14.5 – 29.4	321	238 – 405
hCG (Turbo)	mIU/mL	9.88	5.46 – 14.3	28.7	19.5 – 37.8	391	305 – 476
Human Growth Hormone (hGH) (LKGRH)	ng/mL	3.13	2.12 – 4.14	8.41	6.31 – 10.5	15.9	12.2 – 19.6
Immunoglobulin E (IgE) (Rgt. Lots 401+)	IU/mL	329	231 – 426	98.2	73.3 – 123	111	82.2 – 140
Luteinizing Hormone (LH)	mIU/mL	1.63	1.17 – 2.10	19.6	15.2 – 24.1	62.4	48.5 – 76.3
Progesterone (LKPW1)	ng/mL	0.700	0.337 – 1.06	9.37	6.40 – 12.3	24.4	16.9 – 31.9
Prolactin	ng/mL	7.80	5.80 – 9.80	21.7	16.2 – 27.2	44.9	33.6 – 56.2
PSA (Free)	ng/mL	0.279	0.163 – 0.396	1.44	1.05 – 1.83	9.46	7.14 – 11.8
PSA (Total)	ng/mL	0.651	0.433 – 0.869	3.19	2.37 – 4.00	19.3	14.7 – 23.9
PSA (Total) (Gen. 3)	ng/mL	0.511	0.317 – 0.705	2.32	1.71 – 2.93	15.8	12.0 – 19.7
T3 (Free)	pg/mL	3.01	1.87 – 4.15	6.76	4.82 – 8.70	10.5	7.85 – 13.1
T3 (Total)	ng/dL	69.9	<40.0 – 102	216	148 – 284	368	263 – 473
T3 Uptake/T Uptake	% Uptake	27.3	21.7 – 32.8	34.2	27.4 – 40.9	40.4	32.2 – 48.5
T4 (Free)	ng/dL	1.21	0.938 – 1.49	3.10	2.35 – 3.84	4.75	3.59 – 5.91
T4 (Total)	µg/dL	5.69	3.67 – 7.72	11.2	7.95 – 14.4	14.3	10.4 – 18.3
Testosterone	ng/dL	119	85.2 – 152	468	375 – 561	1033	843 – 1223
Thyroglobulin (Tg)	ng/mL		2.41 – >3.00	1.02	0.386 – 1.66	2.51	1.87 – >3.00
Thyroid Stimulating Hormone (TSH) (Gen. 3)	µIU/mL	0.478	0.394 – 0.562	5.89	4.25 – 7.53	35.7	25.5 – 46.0
Thyroid Stimulating Hormone (TSH) (Rapid)	µIU/mL	0.486	0.400 – 0.572	5.86	4.23 – 7.49	31.5	22.5 – 40.6
Vitamin B12	pg/mL	383	204 – 561	725	441 – 1009		792 – >1200
SIEMENS IMMULITE 2000 / 2000 XPI							
ACTH	pg/mL	42.9	21.0 – 64.8	236	146 – 326	513	325 – 700
AFP	ng/mL	16.5	11.4 – 21.5	97.4	65.2 – 129	204	136 – 272
Androstenedione	ng/mL	0.977	0.521 – 1.43	3.36	2.09 – 4.63	7.03	4.51 – 9.55
Calcitonin	pg/mL	27.0	14.2 – 39.9	173	125 – 221	366	272 – 460
Carbamazepine	µg/mL	2.26	1.67 – 2.85	6.56	5.18 – 7.94	10.8	8.68 – 13.0

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
SIEMENS IMMULITE 2000 / 2000 XPi (continued)							
CEA	ng/mL	2.54	1.67 – 3.41	25.5	19.5 – 31.6	49.2	37.8 – 60.6
Cortisol	µg/dL	2.39	1.43 – 3.35	15.5	11.5 – 19.5	24.8	18.7 – 31.0
C-Peptide	ng/mL	1.32	0.915 – 1.72	5.01	3.78 – 6.25	8.30	6.32 – 10.3
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (DHEA-Sulfate)	µg/dL	58.9	39.2 – 78.6	131	92.4 – 169	459	336 – 583
Digoxin	ng/mL	0.828	0.515 – 1.14	2.17	1.62 – 2.72	3.71	2.89 – 4.53
Estradiol	pg/mL	105	68.4 – 141	328	245 – 411	679	525 – 833
Estriol (Free)	ng/mL	1.25	0.724 – 1.77	5.02	3.57 – 6.46		9.47 – >12.0
Ferritin	ng/mL	64.5	49.4 – 79.6	163	123 – 202	374	283 – 466
Folate	ng/mL	3.47	2.34 – 4.59	7.67	4.99 – 10.4	13.9	8.92 – 18.9
Follicle Stimulating Hormone (FSH)	mIU/mL	8.13	6.41 – 9.85	23.1	18.2 – 28.0	44.2	34.8 – 53.7
Gastrin	pg/mL	67.1	36.7 – 97.4	361	235 – 487	721	477 – 964
hCG	mIU/mL	9.51	5.30 – 13.7	23.4	16.0 – 30.9	280	210 – 350
Human Growth Hormone (hGH) (L2KGRH/L5KGRH)	ng/mL	3.35	2.62 – 4.08	8.68	6.85 – 10.5	15.2	12.0 – 18.3
IGF-1/Somatomedin C	ng/mL	103	69.2 – 137	109	72.7 – 145	95.4	64.1 – 127
Immunoglobulin E (IgE)	IU/mL	346	234 – 458	102	70.4 – 134	114	78.2 – 149
Luteinizing Hormone (LH)	mIU/mL	1.44	0.968 – 1.92	17.1	12.8 – 21.4	52.7	39.7 – 65.7
Phenobarbital	µg/mL	9.31	7.65 – 11.0	23.4	19.5 – 27.3	48.8	40.9 – 56.6
Phenytoin	µg/mL	5.87	3.76 – 7.98	12.6	8.99 – 16.2	23.4	17.4 – 29.5
Progesterone	ng/mL	0.675	0.422 – 0.928	8.56	6.13 – 11.0	20.1	14.5 – 25.8
Prolactin	ng/mL	7.42	5.70 – 9.14	19.9	15.6 – 24.2	41.5	32.8 – 50.2
Prostatic Acid Phosphatase (PAP)	ng/mL	1.49	1.03 – 1.95	20.1	15.4 – 24.9	47.1	36.1 – 58.0
PSA (Free)	ng/mL	0.292	0.190 – 0.393	1.57	1.15 – 1.98	10.1	7.58 – 12.6
PSA (Total)	ng/mL	0.640	0.308 – 0.972	2.88	1.97 – 3.80	18.8	13.6 – 24.1
T3 (Free)	pg/mL	3.05	1.92 – 4.18	6.75	5.00 – 8.49	9.96	7.67 – 12.2
T3 (Total)	ng/dL	73.8	49.3 – 98.3	213	165 – 262	367	292 – 442
T3 Uptake/T Uptake	% Uptake	27.6	23.3 – 32.0	35.3	28.7 – 41.9	40.7	32.4 – 49.0
T4 (Free) (L2KFT4/L5KFT4)	ng/dL	1.18	0.950 – 1.40	2.94	2.34 – 3.53	4.50	3.58 – 5.42
T4 (Total)	µg/dL	5.29	3.73 – 6.86	10.9	8.10 – 13.7	12.9	9.62 – 16.1
Testosterone	ng/dL	130	77.2 – 182	484	317 – 650	1102	736 – 1468
Theophylline	µg/mL	4.61	3.03 – 6.19	15.3	11.1 – 19.5	26.7	19.6 – 33.8
Thyroglobulin (Tg)	ng/mL	2.22	1.00 – 3.43	0.621	<0.200 – 1.24	2.80	1.36 – 4.24
Thyroid Stimulating Hormone (TSH) (Gen. 3)	µIU/mL	0.460	0.367 – 0.553	5.90	4.33 – 7.47	33.3	24.1 – 42.5
Thyroid Stimulating Hormone (TSH) (Rapid)	µIU/mL	0.491	0.398 – 0.584	6.27	4.60 – 7.95	30.8	22.3 – 39.4
Thyroxine Binding Globulin (TBG)	µg/mL	17.4	12.7 – 22.1	13.9	9.02 – 18.9	14.5	9.64 – 19.3
Valproic Acid	µg/mL	30.4	24.2 – 36.7	80.4	65.6 – 95.2	113	92.3 – 133
Vitamin B12	pg/mL	332	233 – 432	608	435 – 781	810	583 – >1000
TOSOH AIA SYSTEMS (2)							
25-Hydroxy Vitamin D (AIA-PACK)	ng/mL	20.8	14.6 – 27.0	26.7	18.7 – 34.7	28.1	19.7 – 36.5
ACTH (ST AIA-PACK)	pg/mL	36.9	25.9 – 48.0	125	87.2 – 162	275	192 – 357
AFP (ST AIA-PACK)	ng/mL	17.8	12.5 – 23.1	102	71.5 – 133	212	149 – 276
CEA (ST AIA-PACK)	ng/mL	2.90	2.00 – 3.80	22.5	15.8 – 29.3	44.3	31.0 – 57.6
Cortisol (ST AIA-PACK)	µg/dL	3.00	2.10 – 3.90	19.2	13.4 – 25.0	28.8	20.2 – 37.4
C-Peptide (II, ST AIA-PACK)	ng/mL	1.45	1.02 – 1.89	5.06	3.54 – 6.58	8.15	5.71 – 10.6
Dehydroepiandrosterone-Sulfate (DHEA-Sulfate) (ST AIA-PACK)	µg/dL	77.8	54.4 – 101	174	122 – 227	561	393 – 729
Estradiol (REF E2-025274)	pg/mL	240	168 – 313	634	444 – 825	1433	1003 – 1862
Estradiol (REF HSE2-025225)	pg/mL	83.8	58.7 – 109	288	202 – 374	493	345 – 641
Ferritin (ST AIA-PACK)	ng/mL	51.9	36.3 – 67.5	129	90.0 – 167	286	200 – 372
Folate (AIA-PACK)	ng/mL	3.48	2.44 – 4.52	7.20	5.04 – 9.36	11.8	8.23 – 15.3
Follicle Stimulating Hormone (FSH) (ST AIA-PACK)	mIU/mL	10.9	7.60 – 14.2	28.5	20.0 – 37.1	52.7	36.9 – 68.5
hCG (Total Beta, ST AIA-PACK)	mIU/mL	8.00	5.60 – 10.4	22.4	15.7 – 29.1	257	180 – 334
Human Growth Hormone (hGH) (ST AIA-PACK)	ng/mL	3.34	2.34 – 4.34	9.12	6.38 – 11.9	16.7	11.7 – 21.7
Immunoglobulin E (IgE) (II, ST AIA-PACK)	IU/mL	310	217 – 402	90.2	63.1 – 117	102	71.2 – 132
Insulin (IRI, ST AIA-PACK)	µIU/mL	17.1	12.0 – 22.2	63.4	44.4 – 82.4	179	125 – 232
Luteinizing Hormone (LH) (II, ST AIA-PACK)	mIU/mL	1.30	0.900 – 1.70	17.0	11.9 – 22.1	65.9	46.1 – 85.7
Progesterone (ST AIA-PACK, PROGII)	ng/mL	0.250	0.180 – 0.330	12.8	8.98 – 16.7	31.2	21.8 – >40.0

INSTRUMENT (1)

	Units	Level 1 - 40431		Level 2 - 40432		Level 3 - 40433	
		Mean	Range	Mean	Range	Mean	Range
TOSOH AIA SYSTEMS (2) (continued)							
Progesterone (ST AIA-PACK, PROGIII) (Cal Lot G33CC359)	ng/mL	0.510	0.360 – 0.660	14.9	10.5 – 19.4	34.7	24.3 – >40.0
Prolactin	ng/mL	1.20	<1.00 – 1.60	5.40	3.80 – 7.00	5.20	3.60 – 6.80
Prostatic Acid Phosphatase (PAP) (ST AIA-PACK)	ng/mL	1.20	0.800 – 1.60	16.2	11.3 – 21.1	37.7	26.4 – >40.0
PSA (Total) (ST AIA-PACK)	ng/mL	0.630	0.440 – 0.820	2.77	1.94 – 3.60	17.0	11.9 – 22.1
T3 (Free) (ST AIA-PACK)	pg/mL	2.89	2.02 – 3.76	10.9	7.61 – 14.1	23.9	16.7 – >25.0
T3 (Total) (ST AIA-PACK)	ng/mL	0.920	0.640 – 1.20	2.19	1.53 – 2.85	3.44	2.41 – 4.47
T3 Uptake/T Uptake (ST AIA-PACK)	% Uptake	34.2	23.9 – 44.5	43.7	30.6 – 56.8	47.6	33.3 – >60.0
T4 (Free) (ST AIA-PACK)	ng/dL	1.11	0.780 – 1.44	2.95	2.07 – 3.84	4.99	3.49 – 6.49
T4 (Total) (ST AIA-PACK)	µg/dL	5.60	3.90 – 7.30	10.0	7.00 – 13.0	13.2	9.20 – 17.2
Testosterone (ST AIA-PACK)	ng/dL	108	75.4 – 140	472	330 – 614	1198	839 – 1558
Thyroid Stimulating Hormone (TSH) (ST AIA-PACK)	µIU/mL	0.420	0.290 – 0.550	5.75	4.03 – 7.48	32.4	22.7 – 42.1
Thyroid Stimulating Hormone (TSH) (TSH3G, AIA-PACK)	µIU/mL	0.420	0.290 – 0.550	5.70	3.99 – 7.41	32.6	22.8 – 42.3
Vitamin B12 (AIA-PACK)	pg/mL	428	300 – 556	757	530 – 984	1029	720 – 1338

FOOTNOTES

(1) All footnotes may not apply to your custom selected data chart.

(2) The assigned values were determined using the reagent and/or instrument manufacturer's protocol and may not represent $\pm 3SD$ ranges.

(3) For the conversion factor, refer to the manufacturer's instruction for use.

▲ Data is not available at this time. Please inquire.

§ The data required to establish the means and acceptable ranges for this assay were not obtained due to limited assignment participation. If your facility is interested in participating in the Value Assignment Program for this assay, please contact your local Bio-Rad office.

■ Data not applicable or not available.