

IMMUNOASSAY PREMIUM PLUS - LEVEL 3 (IA PREMIUM PLUS 3)

CAT. NO. IA3111	GTIN: 05055273207279	SIZE: 12 x 5 ml
CAT. NO. IA3112	GTIN: 05055273207286	SIZE: 4 x 5 ml
LOT NO. 2545EC	EXPIRY: 2028-07-28	

INTENDED USE

This product is intended for in vitro diagnostic use, as assayed quality control material to monitor the accuracy and reproducibility of analytes listed in the package insert.

This device is for prescription use only.

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material, from which this product has been derived, has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

The Abbott Architect CA19-9 assay utilises an antibody/antigen system based on the 1116-NA-19-9 antibody. There are reports that the formulation employed with this system may return elevated concentrations, when compared to other methods for samples expressing high levels of 1116-NA-19-9 reactive determinants.

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (+2°C to +8°C). Reconstituted serum is stable for 7 days at +2°C to +8°C, if kept capped in original container and free from contamination, or 4 weeks frozen once at -20°C. C-Peptide is stable for 1 day at +2°C to +8°C. Thyroglobulin should be tested within 4 hours of reconstitution when stored at +2°C to +8°C, or within 2 weeks when stored at -20°C.

ACTH should be tested immediately after the 30-minute reconstitution period. No frozen stability claim is made for ACTH, Aldosterone and C-Peptide. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

UNOPENED: Store refrigerated (+2°C to +8°C). Stable to expiration date printed on individual vials.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. If bacterial contamination is suspected, the vial should be discarded and a fresh vial reconstituted.

PREPARATION

Immunoassay Premium Plus is supplied lyophilised.

- Carefully reconstitute each vial of lyophilised serum with exactly 5 ml of distilled water at +15°C to +25°C. Close the bottle and allow to stand for 30 minutes before use. Ensure contents are completely dissolved by swirling gently. Avoid formation of foam. Do not shake.
- Refer to the Control section of the individual analyser application.
- Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

MATERIALS PROVIDED

Immunoassay Premium Plus - Level 3: 12 x 5 ml Tri-Level: 4 x 5 ml

MATERIAL REQUIRED BUT NOT PROVIDED

Volumetric pipette

VALUE ASSIGNMENT

Each batch of Immunoassay Premium Plus is submitted to a number of external laboratories. Values are assigned from a consensus of results obtained by these laboratories, using a unique statistical analysis. Average values should normally fall within the listed ranges for analytes in the instruments specified in this product insert. However, variations may be caused by instrument reagents and laboratory technique. Therefore, the range produced herein should only be considered as a reference and it is recommended that each laboratory establish its own mean and acceptable ranges. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

If a method is unavailable, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.



Randox Teoranta, Meenmore,
Dungloe, Donegal,
F94 TV06, Ireland

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Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
17-OH-Progesterone	ng/ml	10.6	7.95	13.3	1.35	2.70	DiaMetra ELISA	
	nmol/l	32.0	24.0	40.0	4.00	8.00		
	ng/ml	15.7	11.8	19.6	1.95	3.90	DRG ELISA	
	nmol/l	47.5	35.6	59.4	5.95	11.9		
	ng/ml	5.86	4.40	7.32	0.730	1.46	IDS-iSYS 17-OH Progesterone	
	nmol/l	17.7	13.3	22.1	2.20	4.40		
	ng/ml	7.71	5.78	9.64	0.965	1.93	Immunotech RIA	
	nmol/l	23.3	17.5	29.1	2.90	5.80		
	25-OH-Vitamin D	ng/ml	38.5	28.9	48.1	4.80	9.60	Abbott Alinity i
		nmol/l	96.2	72.2	120	11.9	23.8	
ng/ml		37.2	27.9	46.5	4.65	9.30	Abbott Architect (3L52)	
nmol/l		92.9	69.7	116	11.6	23.1		
ng/ml		37.1	27.8	46.4	4.65	9.30	Abbott Architect (5P02)	
nmol/l		92.6	69.5	116	11.7	23.4		
ng/ml		48.9	36.7	61.1	6.10	12.2	Beckman Access 25 OH Vitamin D Total	
nmol/l		122	91.5	153	15.5	31.0		
ng/ml		50.5	37.9	63.1	6.30	12.6	Beckman Dxl 600/800	
nmol/l		126	94.5	158	16.0	32.0		
ng/ml		48.9	36.7	61.1	6.10	12.2	Beckman Dxl 9000	
nmol/l		122	91.5	153	15.5	31.0		
ng/ml		38.6	29.0	48.2	4.80	9.60	bioMerieux Vidas/mini Vidas/Vidas 3	
nmol/l		96.3	72.2	120	11.9	23.7		
ng/ml		40.0	30.0	50.0	5.00	10.0	DiaSorin Liaison	
nmol/l		99.9	74.9	125	12.6	25.1		
ng/ml		40.9	30.7	51.1	5.10	10.2	DiaSorin Liaison XL	
nmol/l		102	76.5	128	13.0	26.0		
ng/ml		39.3	29.5	49.1	4.90	9.80	HPLC	
nmol/l		98.2	73.7	123	12.4	24.8		
ng/ml		43.7	32.8	54.6	5.45	10.9	J. Mitra CLIA - 181	
nmol/l		109	81.8	136	13.5	27.0		
ng/ml		43.3	32.5	54.1	5.40	10.8	J. Mitra CLIA - 2000	
nmol/l		108	81.0	135	13.5	27.0		
ng/ml		39.0	29.3	48.7	4.85	9.70	Lifotronic eCL	
nmol/l		97.3	73.0	122	12.4	24.7		
ng/ml		56.1	42.1	70.1	7.00	14.0	Maccura I Series	
nmol/l		140	105	175	17.5	35.0		
ng/ml	52.5	39.4	65.6	6.55	13.1	Mindray CL 900i		
nmol/l	131	98.3	164	16.5	33.0			

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
25-OH-Vitamin D	ng/ml	56.1	42.1	70.1	7.00	14.0	Mindray CL series (Excl. CL 900 series)
	nmol/l	140	105	175	17.5	35.0	
	ng/ml	66.1	49.6	82.6	8.25	16.5	Ortho Vitros 3600/5600/ECi/XT 7600
	nmol/l	165	124	206	20.5	41.0	
	ng/ml	32.1	24.1	40.1	4.00	8.00	Roche Vitamin D Total
	nmol/l	80.0	60.0	100	10.0	20.0	
	ng/ml	31.9	23.9	39.9	4.00	8.00	Roche Vitamin D Total II
	nmol/l	79.7	59.8	99.6	9.95	19.9	
	ng/ml	32.9	24.7	41.1	4.10	8.20	Roche Vitamin D Total II e402/e801
	nmol/l	82.1	61.6	103	10.5	20.9	
	ng/ml	31.7	23.8	39.6	3.95	7.90	Roche Vitamin D total III
	nmol/l	79.1	59.3	98.9	9.90	19.8	
	ng/ml	33.0	24.8	41.2	4.10	8.20	Roche Vitamin D Total III e402/e801
	nmol/l	82.3	61.7	103	10.4	20.7	
	ng/ml	35.9	26.9	44.9	4.50	9.00	Shenzhen YHLO iFlash Series
	nmol/l	89.7	67.3	112	11.2	22.3	
	ng/ml	57.3	43.0	71.6	7.15	14.3	Siemens Atellica IM
	nmol/l	143	107	179	18.0	36.0	
ng/ml	55.7	41.8	69.6	6.95	13.9	Siemens Centaur	
nmol/l	139	104	174	17.5	35.0		
ng/ml	58.9	44.2	73.6	7.35	14.7	TOSOH AIA Series	
nmol/l	147	110	184	18.5	37.0		
ng/ml	66.5	49.9	83.1	8.30	16.6	Tosoh AIA-CL Series	
nmol/l	166	125	207	20.5	41.0		
ACTH	pg/ml	73.6	55.2	92.0	9.20	18.4	Diasource IRMA
	pmol/l	16.2	12.2	20.2	2.00	4.00	
	pg/ml	50.0	37.5	62.5	6.25	12.5	Mindray CL series (Excl. CL 900 series)
	pmol/l	11.0	8.25	13.8	1.40	2.80	
	pg/ml	51.8	38.9	64.7	6.45	12.9	Roche Cobas e402/e801
	pmol/l	11.4	8.55	14.3	1.45	2.90	
	pg/ml	75.5	56.6	94.4	9.45	18.9	Siemens/DPC Immulite 1000
pmol/l	16.6	12.5	20.7	2.05	4.10		
pg/ml	84.5	63.4	106	10.8	21.5	Siemens/DPC Immulite 2000/2500	
pmol/l	18.6	14.0	23.2	2.30	4.60		
Aldosterone	pg/ml	261	196	326	32.5	65.0	DiaSorin Liaison
	pmol/l	724	543	905	90.5	181	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Aldosterone	pg/ml	276	207	345	34.5	69.0	DiaSorin Liaison XL
	pmol/l	764	573	955	95.5	191	
	pg/ml	287	215	359	36.0	72.0	IDS iSYS
	pmol/l	795	596	994	99.5	199	
	pg/ml	359	269	449	45.0	90.0	Immunotech RIA
	pmol/l	994	746	1242	124	248	
Alpha-fetoprotein	ng/ml	157	126	188	15.5	31.0	3HB-GGG Start
	KIU/l = IU/ml	130	104	156	13.0	26.0	
	ng/ml	157	126	188	15.5	31.0	Abbott Alinity i
	KIU/l = IU/ml	130	104	156	13.0	26.0	
	ng/ml	162	130	194	16.0	32.0	Beckman Access/LXi725
	KIU/l = IU/ml	134	107	161	13.5	27.0	
	ng/ml	155	124	186	15.5	31.0	Beckman Dxl 600/800
	KIU/l = IU/ml	128	102	154	13.0	26.0	
	ng/ml	162	130	194	16.0	32.0	Beckman Dxl 9000
	KIU/l = IU/ml	134	107	161	13.5	27.0	
	ng/ml	168	134	202	17.0	34.0	Beckman/Immunotech IRMA
	KIU/l = IU/ml	139	111	167	14.0	28.0	
	ng/ml	97.9	78.3	118	10.1	20.1	bioMerieux, Vidas/Mini Vidas
	KIU/l = IU/ml	80.9	64.7	97.1	8.10	16.2	
ng/ml	169	135	203	17.0	34.0	DiaSorin Liaison XL	
KIU/l = IU/ml	140	112	168	14.0	28.0		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Alpha-fetoprotein	ng/ml	229	183	275	23.0	46.0	Finecare
	KIU/I = IU/ml	189	151	227	19.0	38.0	
	ng/ml	163	130	196	16.5	33.0	Fujirebio Lumipulse G Series
	KIU/I = IU/ml	135	108	162	13.5	27.0	
	ng/ml	149	119	179	15.0	30.0	J. Mitra CLIA - 181
	KIU/I = IU/ml	123	98.4	148	12.5	25.0	
	ng/ml	148	118	178	15.0	30.0	J. Mitra CLIA - 2000
	KIU/I = IU/ml	122	97.6	146	12.0	24.0	
	ng/ml	151	121	181	15.0	30.0	Mindray CL 900i/920i/960i/980i
	KIU/I = IU/ml	125	100	150	12.5	25.0	
	ng/ml	145	116	174	14.5	29.0	Mindray CL series (Excl. CL 900 series)
	KIU/I = IU/ml	120	96.0	144	12.0	24.0	
	ng/ml	236	189	283	23.5	47.0	Ortho Vitros 3600/5600/ECi/XT 7600
	KIU/I = IU/ml	195	156	234	19.5	39.0	
	ng/ml	157	126	188	15.5	31.0	Roche Cobas 4000/e411
	KIU/I = IU/ml	130	104	156	13.0	26.0	
	ng/ml	165	132	198	16.5	33.0	Roche Cobas e402/e801
	KIU/I = IU/ml	136	109	163	13.5	27.0	

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Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Alpha-fetoprotein	ng/ml	160	128	192	16.0	32.0	Roche Cobas e601/ 602
	KIU/l = IU/ml	132	106	158	13.0	26.0	
	ng/ml	161	129	193	16.0	32.0	Roche Elecsys
	KIU/l = IU/ml	133	106	160	13.5	27.0	
	ng/ml	143	114	172	14.5	29.0	Shenzhen YHLO iFlash Series
	KIU/l = IU/ml	118	94.4	142	12.0	24.0	
	ng/ml	231	185	277	23.0	46.0	Siemens Atellica IM
	KIU/l = IU/ml	191	153	229	19.0	38.0	
	ng/ml	237	190	284	23.5	47.0	Siemens Centaur
	KIU/l = IU/ml	196	157	235	19.5	39.0	
	ng/ml	128	102	154	13.0	26.0	Siemens/DPC Immulite 2000/2500
	KIU/l = IU/ml	106	84.8	127	10.5	21.0	
ng/ml	146	117	175	14.5	29.0	Sysmex HISCL Series	
KIU/l = IU/ml	121	96.8	145	12.0	24.0		
ng/ml	146	117	175	14.5	29.0	TOSOH AIA Series	
KIU/l = IU/ml	121	96.8	145	12.0	24.0		
ng/ml	133	106	160	13.5	27.0	Tosoh AIA-CL Series	
KIU/l = IU/ml	110	88.0	132	11.0	22.0		
Amikacin	µg/ml	12.8	10.2	15.4	1.30	2.60	Abbott Alinity
	µmol/l	21.9	17.5	26.3	2.20	4.40	

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Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Amikacin	µg/ml	12.6	10.1	15.1	1.25	2.50	EMIT
	µmol/l	21.5	17.2	25.8	2.15	4.30	
	µg/ml	12.9	10.3	15.5	1.30	2.60	Roche Cobas 6000/8000
	µmol/l	22.0	17.6	26.4	2.20	4.40	
	µg/ml	12.6	10.1	15.1	1.25	2.50	Thermo Scientific QMS Amikacin
	µmol/l	21.6	17.3	25.9	2.15	4.30	
Androstenedione	ng/ml	7.35	5.51	9.19	0.920	1.84	Beckman Coulter Active RIA
	nmol/l	25.6	19.2	32.0	3.20	6.40	
	ng/ml	7.58	5.69	9.47	0.945	1.89	DiaMetra ELISA
	nmol/l	26.4	19.8	33.0	3.30	6.60	
	ng/ml	9.33	7.00	11.7	1.19	2.37	DiaSorin Liaison XL
	nmol/l	32.5	24.4	40.6	4.05	8.10	
	ng/ml	7.66	5.75	9.57	0.955	1.91	LC/MS
	nmol/l	26.7	20.0	33.4	3.35	6.70	
	ng/ml	7.40	5.55	9.25	0.925	1.85	Roche Elecsys
	nmol/l	25.8	19.4	32.2	3.20	6.40	
	ng/ml	6.77	5.08	8.46	0.845	1.69	Siemens Atellica IM
	nmol/l	23.6	17.7	29.5	2.95	5.90	
	ng/ml	11.2	8.40	14.0	1.40	2.80	Siemens/DPC Immulite 2000
	nmol/l	39.1	29.3	48.9	4.90	9.80	
Beta-2-Microglobulin	µg/ml = mg/l	5.47	4.38	6.56	0.545	1.09	Abbott Alinity
	µg/ml = mg/l	5.20	4.16	6.24	0.520	1.04	Abbott Architect
	µg/ml = mg/l	5.18	4.14	6.22	0.520	1.04	Beckman AU Instruments
	µg/ml = mg/l	5.42	4.34	6.50	0.540	1.08	bioMerieux, VIDAS
	µg/ml = mg/l	5.31	4.25	6.37	0.530	1.06	DiaSorin Liaison XL
	µg/ml = mg/l	5.11	4.09	6.13	0.510	1.02	Roche Cobas 4000/c311
	µg/ml = mg/l	5.17	4.14	6.20	0.515	1.03	Roche Cobas 6000/8000
	µg/ml = mg/l	5.17	4.14	6.20	0.515	1.03	Roche Elecsys
	µg/ml = mg/l	5.14	4.11	6.17	0.515	1.03	Roche Tinaquant

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Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Beta-2-Microglobulin	µg/ml = mg/l	6.26	5.01	7.51	0.625	1.25	Siemens Atellica CH
	µg/ml = mg/l	5.17	4.14	6.20	0.515	1.03	Siemens/Behring Nephelometer
	µg/ml = mg/l	4.63	3.70	5.56	0.465	0.930	Siemens/DPC Immulite 2000/2500
	µg/ml = mg/l	4.97	3.98	5.96	0.495	0.990	Tosoh AIA-CL Series
C-Peptide	ng/ml	5.95	4.46	7.44	0.745	1.49	Abbott Alinity i
	nmol/l	1.97	1.48	2.46	0.245	0.490	
	ng/ml	6.13	4.60	7.66	0.765	1.53	Abbott Architect
	nmol/l	2.03	1.52	2.54	0.255	0.510	
	ng/ml	4.08	3.06	5.10	0.510	1.02	Beckman Access C-Peptide
	nmol/l	1.35	1.01	1.69	0.170	0.340	
	ng/ml	4.08	3.06	5.10	0.510	1.02	Beckman Dxl 9000
	nmol/l	1.35	1.01	1.69	0.170	0.340	
	ng/ml	6.88	5.16	8.60	0.860	1.72	DiaSorin Liaison
	nmol/l	2.28	1.71	2.85	0.285	0.570	
	ng/ml	7.19	5.39	8.99	0.900	1.80	DiaSorin Liaison XL
	nmol/l	2.38	1.79	2.97	0.295	0.590	
	ng/ml	7.43	5.57	9.29	0.930	1.86	J. Mitra CLIA - 181
	nmol/l	2.46	1.85	3.07	0.305	0.610	
	ng/ml	7.76	5.82	9.70	0.970	1.94	J. Mitra CLIA - 2000
	nmol/l	2.57	1.93	3.21	0.320	0.640	
	ng/ml	5.37	4.03	6.71	0.670	1.34	Mindray CL series (Excl. CL 900 series)
	nmol/l	1.78	1.34	2.22	0.220	0.440	
	ng/ml	6.46	4.85	8.07	0.805	1.61	Ortho Vitros 3600/5600/ECi/ XT 7600
	nmol/l	2.14	1.61	2.67	0.265	0.530	
ng/ml	6.79	5.09	8.49	0.850	1.70	Roche Cobas 4000/e411	
nmol/l	2.25	1.69	2.81	0.280	0.560		
ng/ml	6.43	4.82	8.04	0.805	1.61	Roche Cobas e402/e801	
nmol/l	2.13	1.60	2.66	0.265	0.530		
ng/ml	6.46	4.85	8.07	0.805	1.61	Roche Cobas e601/ 602	
nmol/l	2.14	1.61	2.67	0.265	0.530		
ng/ml	7.31	5.48	9.14	0.915	1.83	Shenzhen YHLO iFlash Series	
nmol/l	2.42	1.82	3.02	0.300	0.600		
ng/ml	5.28	3.96	6.60	0.660	1.32	Siemens Atellica IM	
nmol/l	1.75	1.31	2.19	0.220	0.440		

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Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
C-Peptide	ng/ml	6.16	4.62	7.70	0.770	1.54	Siemens/DPC Immulite 2000/2500	
	nmol/l	2.04	1.53	2.55	0.255	0.510		
	ng/ml	5.89	4.42	7.36	0.735	1.47	TOSOH AIA Series	
	nmol/l	1.95	1.46	2.44	0.245	0.490		
	ng/ml	5.86	4.40	7.32	0.730	1.46	Tosoh AIA-CL Series	
	nmol/l	1.94	1.46	2.42	0.240	0.480		
	CA 125	U/ml	252	202	302	25.0	50.0	Abbott Alinity
		U/ml	246	197	295	24.5	49.0	Abbott Architect
U/ml		142	114	170	14.0	28.0	Beckman Access/LXi725	
U/ml		142	114	170	14.0	28.0	Beckman Dxl 9000	
U/ml		200	160	240	20.0	40.0	BioMerieux VIDAS	
U/ml		243	194	292	24.5	49.0	DiaSorin Liaison XL	
U/ml		191	153	229	19.0	38.0	Fujirebio Lumipulse G Series	
U/ml		86.8	69.4	104	8.60	17.2	Immunotech IRMA	
U/ml		162	130	194	16.0	32.0	J. Mitra CLIA - 181	
U/ml		162	130	194	16.0	32.0	J. Mitra CLIA - 2000	
U/ml		215	172	258	21.5	43.0	Mindray CL 900i/920i/960i/980i	
U/ml		214	171	257	21.5	43.0	Mindray CL series (Excl. CL 900 series)	
U/ml		169	135	203	17.0	34.0	Roche Cobas 4000/e411	
U/ml		156	125	187	15.5	31.0	Roche Cobas e402/e801	
U/ml		166	133	199	16.5	33.0	Roche Cobas e601/ 602	
U/ml		164	131	197	16.5	33.0	Roche Elecsys	
U/ml		233	186	280	23.5	47.0	Shenzhen YHLO iFlash Series	
U/ml		213	170	256	21.5	43.0	Siemens Atellica IM	
U/ml		185	148	222	18.5	37.0	Siemens Centaur CA125 II	
U/ml		176	141	211	17.5	35.0	Siemens Centaur OV Kit	
U/ml		119	95.2	143	12.0	24.0	Siemens/DPC Immulite 2000/2500	
U/ml		47.3	37.8	56.8	4.75	9.50	Sysmex HISCL Series	
U/ml		376	301	451	37.5	75.0	TOSOH AIA Series	
U/ml		254	203	305	25.5	51.0	Tosoh AIA-CL Series	
CA 15-3		U/ml	74.7	59.8	89.6	7.45	14.9	Abbott Alinity i
		U/ml	75.4	60.3	90.5	7.55	15.1	Abbott Architect
		U/ml	33.9	27.1	40.7	3.40	6.80	Beckman Access/LXi725
		U/ml	33.1	26.5	39.7	3.30	6.60	Beckman Dxl 600/800
	U/ml	33.9	27.1	40.7	3.40	6.80	Beckman Dxl 9000	
	U/ml	55.1	44.1	66.1	5.50	11.0	BioMerieux VIDAS	
	U/ml	65.1	52.1	78.1	6.50	13.0	DiaSorin Liaison XL	
	U/ml	69.9	55.9	83.9	7.00	14.0	Fujirebio Lumipulse G Series	
	U/ml	74.4	59.5	89.3	7.45	14.9	Immunotech IRMA	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
CA 15-3	U/ml	64.9	51.9	77.9	6.50	13.0	J. Mitra CLIA - 181
	U/ml	64.1	51.3	76.9	6.40	12.8	J. Mitra CLIA - 2000
	U/ml	42.2	33.8	50.6	4.20	8.40	Mindray CL 900i/920i/960i/980i
	U/ml	40.5	32.4	48.6	4.05	8.10	Mindray CL series (Excl. CL 900 series)
	U/ml	56.6	45.3	67.9	5.65	11.3	Ortho Vitros 3600/5600/ECi/XT 7600
	U/ml	66.4	53.1	79.7	6.65	13.3	Roche Cobas 4000/e411
	U/ml	66.4	53.1	79.7	6.65	13.3	Roche Cobas e402/e801
	U/ml	67.2	53.8	80.6	6.70	13.4	Roche Cobas e601/ 602
	U/ml	64.6	51.7	77.5	6.45	12.9	Roche Elecsys
	U/ml	77.6	62.1	93.1	7.75	15.5	Shenzhen YHLO iFlash Series
	U/ml	60.4	48.3	72.5	6.05	12.1	Siemens Atellica IM
	U/ml	58.9	47.1	70.7	5.90	11.8	Siemens Centaur
	U/ml	75.9	60.7	91.1	7.60	15.2	Siemens/DPC Immulite 2000/2500
	U/ml	78.9	63.1	94.7	7.90	15.8	TOSOH AIA Series
	U/ml	65.4	52.3	78.5	6.55	13.1	Tosoh AIA-CL Series
CA 19-9	U/ml	314	251	377	31.5	63.0	Abbott Alinity XR
	U/ml	314	251	377	31.5	63.0	Abbott Architect XR
	U/ml	582	466	698	58.0	116	Beckman Access/LXi725
	U/ml	523	418	628	52.5	105	Beckman Dxl 600/800
	U/ml	582	466	698	58.0	116	Beckman Dxl 9000
	U/ml	135	108	162	13.5	27.0	bioMerieux, VIDAS
	U/ml	193	154	232	19.5	39.0	DiaSorin Liaison XL
	U/ml	188	150	226	19.0	38.0	Izotop RIA
	U/ml	171	137	205	17.0	34.0	J. Mitra CLIA - 181
	U/ml	171	137	205	17.0	34.0	J. Mitra CLIA - 2000
	U/ml	98.8	79.0	119	10.1	20.2	Mindray CL 900i/920i/960i/980i
	U/ml	98.9	79.1	119	10.1	20.1	Mindray CL series (Excl. CL 900 series)
	U/ml	228	182	274	23.0	46.0	Ortho Vitros 3600/5600/ECi/XT 7600
	U/ml	132	106	158	13.0	26.0	Roche Cobas 4000/e411
	U/ml	147	118	176	14.5	29.0	Roche Cobas e402/e801
	U/ml	138	110	166	14.0	28.0	Roche Cobas e601/ 602
	U/ml	137	110	164	13.5	27.0	Roche Elecsys
	U/ml	86.1	68.9	103	8.45	16.9	Shenzhen YHLO iFlash Series
	U/ml	202	162	242	20.0	40.0	Siemens Atellica IM
	U/ml	192	154	230	19.0	38.0	Siemens Centaur
	U/ml	544	435	653	54.5	109	Siemens/DPC Immulite 2000/2500
	U/ml	47.9	38.3	57.5	4.80	9.60	Sysmex HISCL Series
	U/ml	130	104	156	13.0	26.0	TOSOH AIA Series
	U/ml	143	114	172	14.5	29.0	Tosoh AIA-CL Series

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Carbamazepine	µg/ml	13.0	10.4	15.6	1.30	2.60	Abbott Alinity (PETINA)
	µmol/l	54.8	43.8	65.8	5.50	11.0	
	µg/ml	15.0	12.0	18.0	1.50	3.00	Abbott Architect (CMIA)
	µmol/l	63.5	50.8	76.2	6.35	12.7	
	µg/ml	13.1	10.5	15.7	1.30	2.60	Abbott Architect (PETINIA)
	µmol/l	55.5	44.4	66.6	5.55	11.1	
	µg/ml	15.2	12.2	18.2	1.50	3.00	Beckman AU Instruments
	µmol/l	64.5	51.6	77.4	6.45	12.9	
	µg/ml	15.3	12.2	18.4	1.55	3.10	EMIT
	µmol/l	64.8	51.8	77.8	6.50	13.0	
	µg/ml	15.0	12.0	18.0	1.50	3.00	Roche Cobas 4000/c311
	µmol/l	63.6	50.9	76.3	6.35	12.7	
	µg/ml	15.4	12.3	18.5	1.55	3.10	Roche Cobas 6000/8000
	µmol/l	65.2	52.2	78.2	6.50	13.0	
µg/ml	13.2	10.6	15.8	1.30	2.60	Siemens/DPC Immulite 2000/2500	
µmol/l	55.7	44.6	66.8	5.55	11.1		
CEA	ng/ml = µg/l	61.1	48.9	73.3	6.10	12.2	Abbott Alinity i
	ng/ml = µg/l	62.4	49.9	74.9	6.25	12.5	Abbott Architect
	ng/ml = µg/l	55.5	44.4	66.6	5.55	11.1	Beckman Access/LXi725
	ng/ml = µg/l	52.5	42.0	63.0	5.25	10.5	Beckman Dxl 600/800
	ng/ml = µg/l	55.5	44.4	66.6	5.55	11.1	Beckman Dxl 9000
	ng/ml = µg/l	52.8	42.2	63.4	5.30	10.6	Beckman/Immunotech IRMA
	ng/ml = µg/l	55.4	44.3	66.5	5.55	11.1	bioMerieux, VIDAS
	ng/ml = µg/l	47.6	38.1	57.1	4.75	9.50	DiaSorin Liaison
	ng/ml = µg/l	58.9	47.1	70.7	5.90	11.8	DiaSorin Liaison XL
	ng/ml = µg/l	54.4	43.5	65.3	5.45	10.9	J. Mitra CLIA - 181
	ng/ml = µg/l	54.1	43.3	64.9	5.40	10.8	J. Mitra CLIA - 2000

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
CEA	ng/ml = µg/l	40.3	32.2	48.4	4.05	8.10	Mindray CL 900i/920i/960i/980i
	ng/ml = µg/l	39.5	31.6	47.4	3.95	7.90	Mindray CL series (Excl. CL 900 series)
	ng/ml = µg/l	59.9	47.9	71.9	6.00	12.0	Ortho Vitros 3600/5600/ECi/XT 7600
	ng/ml = µg/l	46.3	37.0	55.6	4.65	9.30	Roche Cobas 4000/e411
	ng/ml = µg/l	45.9	36.7	55.1	4.60	9.20	Roche Cobas e402/e801
	ng/ml = µg/l	45.3	36.2	54.4	4.55	9.10	Roche Cobas e601/ 602
	ng/ml = µg/l	46.6	37.3	55.9	4.65	9.30	Roche Elecsys
	ng/ml = µg/l	51.5	41.2	61.8	5.15	10.3	Shenzhen YHLO iFlash Series
	ng/ml = µg/l	59.6	47.7	71.5	5.95	11.9	Siemens Atellica IM
	ng/ml = µg/l	57.2	45.8	68.6	5.70	11.4	Siemens Centaur
	ng/ml = µg/l	80.5	64.4	96.6	8.05	16.1	Siemens/DPC Immulite 2000/2500
	ng/ml = µg/l	50.0	40.0	60.0	5.00	10.0	Sysmex HISCL Series
	ng/ml = µg/l	68.0	54.4	81.6	6.80	13.6	Tosoh
ng/ml = µg/l	73.4	58.7	88.1	7.35	14.7	Tosoh AIA-CL Series	
Cortisol	nmol/l µg/dl	792 28.5	594 21.4	990 35.6	99.0 3.55	198 7.10	Abbott Alinity i
	nmol/l µg/dl	818 29.4	614 22.1	1022 36.7	102 3.65	204 7.30	Abbott Architect
	nmol/l µg/dl	936 33.7	702 25.3	1170 42.1	117 4.20	234 8.40	Beckman Access/LXi725
	nmol/l µg/dl	866 31.2	650 23.4	1082 39.0	108 3.90	216 7.80	Beckman Dxl 600/800
	nmol/l µg/dl	936 33.7	702 25.3	1170 42.1	117 4.20	234 8.40	Beckman Dxl 9000

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cortisol	nmol/l	880	660	1100	110	220	bioMerieux, VIDAS
	µg/dl	31.7	23.8	39.6	3.95	7.90	
	nmol/l	1154	866	1442	144	288	DiaSorin Liaison XL
	µg/dl	41.5	31.1	51.9	5.20	10.4	
	nmol/l	977	733	1221	122	244	Immunotech RIA
	µg/dl	35.2	26.4	44.0	4.40	8.80	
	nmol/l	69.5	52.1	86.9	8.70	17.4	J. Mitra CLIA - 181
	µg/dl	2.50	1.88	3.12	0.310	0.620	
	nmol/l	68.7	51.5	85.9	8.60	17.2	J. Mitra CLIA - 2000
	µg/dl	2.47	1.85	3.09	0.310	0.620	
	nmol/l	964	723	1205	121	241	Mindray CL 900i/920i/960i/980i
	µg/dl	34.7	26.0	43.4	4.35	8.70	
	nmol/l	983	737	1229	123	246	Mindray CL series (Excl. CL 900 series)
	µg/dl	35.4	26.6	44.2	4.40	8.80	
	nmol/l	869	652	1086	109	217	Ortho Vitros 3600/5600/ECi/XT 7600
	µg/dl	31.3	23.5	39.1	3.90	7.80	
	nmol/l	903	677	1129	113	226	Roche Cobas 4000/e411
	µg/dl	32.5	24.4	40.6	4.05	8.10	
	nmol/l	895	671	1119	112	224	Roche Cobas 4000/e411 Gen II
	µg/dl	32.2	24.2	40.2	4.00	8.00	
	nmol/l	884	663	1105	111	221	Roche Cobas e402/e801
	µg/dl	31.8	23.9	39.7	3.95	7.90	
	nmol/l	878	659	1097	110	219	Roche Cobas e402/e801 Gen II
	µg/dl	31.6	23.7	39.5	3.95	7.90	
	nmol/l	903	677	1129	113	226	Roche Cobas e601/ 602
	µg/dl	32.5	24.4	40.6	4.05	8.10	
	nmol/l	899	674	1124	113	225	Roche Cobas e601/602 Gen II
	µg/dl	32.4	24.3	40.5	4.05	8.10	
	nmol/l	886	665	1107	111	221	Roche Elecsys
	µg/dl	31.9	23.9	39.9	4.00	8.00	
	nmol/l	834	626	1042	104	208	Shenzhen YHLO iFlash Series
	µg/dl	30.0	22.5	37.5	3.75	7.50	
	nmol/l	1035	776	1294	130	259	Siemens Atellica IM
	µg/dl	37.3	28.0	46.6	4.65	9.30	
	nmol/l	1093	820	1366	137	273	Siemens Centaur
	µg/dl	39.3	29.5	49.1	4.90	9.80	
	nmol/l	813	610	1016	102	203	Siemens/DPC Immulite 2000/2500
	µg/dl	29.3	22.0	36.6	3.65	7.30	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cortisol	nmol/l	982	737	1227	123	245	TOSOH AIA Series
	µg/dl	35.4	26.6	44.2	4.40	8.80	
	nmol/l	838	629	1047	105	209	Tosoh AIA-CL Series
	µg/dl	30.2	22.7	37.7	3.75	7.50	
DHEA-S	µmol/l	20.1	16.1	24.1	2.00	4.00	Abbott Alinity i
	µmol/l	19.8	15.8	23.8	2.00	4.00	Abbott Architect
	µmol/l	15.9	12.7	19.1	1.60	3.20	Beckman Access/LXi725
	µmol/l	15.8	12.6	19.0	1.60	3.20	Beckman Dxl 600/800
	µmol/l	15.9	12.7	19.1	1.60	3.20	Beckman Dxl 9000
	µmol/l	18.2	14.6	21.8	1.80	3.60	DiaSorin Liaison XL
	µmol/l	20.4	16.3	24.5	2.05	4.10	Mindray CL series (Excl. CL 900 series)
	µmol/l	23.9	19.1	28.7	2.40	4.80	Roche Cobas 4000/e411
	µmol/l	24.5	19.6	29.4	2.45	4.90	Roche Cobas e402/e801
	µmol/l	23.9	19.1	28.7	2.40	4.80	Roche Cobas e601/ 602
	µmol/l	23.9	19.1	28.7	2.40	4.80	Roche Elecsys
	µmol/l	21.9	17.5	26.3	2.20	4.40	Shenzhen YHLO iFlash Series
	µmol/l	15.4	12.3	18.5	1.55	3.10	Siemens Atellica IM
	µmol/l	16.5	13.2	19.8	1.65	3.30	Siemens Centaur
	µmol/l	16.8	13.4	20.2	1.70	3.40	Siemens/DPC Immulite 2000/2500
	µmol/l	19.6	15.7	23.5	1.95	3.90	TOSOH AIA Series
µmol/l	19.3	15.4	23.2	1.95	3.90	Tosoh AIA-CL Series	
Digoxin	ng/ml	3.35	2.68	4.02	0.335	0.670	Abbott Alinity (CMIA)
	nmol/l	4.29	3.43	5.15	0.430	0.860	
	ng/ml	3.36	2.69	4.03	0.335	0.670	Abbott Alinity (PETINA)
	nmol/l	4.30	3.44	5.16	0.430	0.860	
	ng/ml	2.62	2.10	3.14	0.260	0.520	Abbott Architect (CMIA)
	nmol/l	3.36	2.69	4.03	0.335	0.670	
	ng/ml	3.46	2.77	4.15	0.345	0.690	Beckman AU Instruments
	nmol/l	4.43	3.54	5.32	0.445	0.890	
	ng/ml	3.23	2.58	3.88	0.325	0.650	Beckman Dxl 600/800
	nmol/l	4.13	3.30	4.96	0.415	0.830	
	ng/ml	3.34	2.67	4.01	0.335	0.670	Roche Cobas 4000/e411
	nmol/l	4.28	3.42	5.14	0.430	0.860	
	ng/ml	3.13	2.50	3.76	0.315	0.630	Roche Cobas C303/501/502/503/701
	nmol/l	4.01	3.21	4.81	0.400	0.800	
	ng/ml	3.19	2.55	3.83	0.320	0.640	Roche Cobas e402/e801
	nmol/l	4.09	3.27	4.91	0.410	0.820	
ng/ml	3.32	2.66	3.98	0.330	0.660	Roche Cobas e601/602	
nmol/l	4.25	3.40	5.10	0.425	0.850		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Digoxin	ng/ml	3.19	2.55	3.83	0.320	0.640	Siemens Atellica CH	
	nmol/l	4.08	3.26	4.90	0.410	0.820		
	ng/ml	3.89	3.11	4.67	0.390	0.780	Siemens Atellica IM	
	nmol/l	4.98	3.98	5.98	0.500	1.00		
	ng/ml	3.73	2.98	4.48	0.375	0.750	Siemens/DPC Immulite 2000/2500	
	nmol/l	4.77	3.82	5.72	0.475	0.950		
	Ferritin	ng/ml = µg/l	322	258	386	32.0	64.0	Abbott Alinity i
		ng/ml = µg/l	308	246	370	31.0	62.0	Abbott Architect Chemilum
ng/ml = µg/l		308	246	370	31.0	62.0	Abbott Architect Quantia	
ng/ml = µg/l		175	140	210	17.5	35.0	Beckman Access/LXi725	
ng/ml = µg/l		209	167	251	21.0	42.0	Beckman AU Instruments	
ng/ml = µg/l		174	139	209	17.5	35.0	Beckman Dxl 600/800	
ng/ml = µg/l		175	140	210	17.5	35.0	Beckman Dxl 9000	
ng/ml = µg/l		203	162	244	20.5	41.0	bioMerieux, VIDAS	
ng/ml = µg/l		280	224	336	28.0	56.0	DiaSorin Liaison XL	
ng/ml = µg/l		304	243	365	30.5	61.0	J. Mitra CLIA - 181	
ng/ml = µg/l		312	250	374	31.0	62.0	J. Mitra CLIA - 2000	
ng/ml = µg/l		270	216	324	27.0	54.0	Lifotronic eCL	
ng/ml = µg/l		282	226	338	28.0	56.0	Mindray CL 900i/920i/960i/980i	
ng/ml = µg/l		279	223	335	28.0	56.0	Mindray CL series (Excl. CL 900 series)	
ng/ml = µg/l		165	132	198	16.5	33.0	Ortho Vitros 3600/5600/ECi/XT/7600	
ng/ml = µg/l		268	214	322	27.0	54.0	Roche Cobas 4000/c311	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Ferritin	ng/ml = µg/l	249	199	299	25.0	50.0	Roche Cobas C303/501/502/503/701/702
	ng/ml = µg/l	267	214	320	26.5	53.0	Roche Cobas e402/e801
	ng/ml = µg/l	287	230	344	28.5	57.0	Roche Elecsys / Cobas e411
	ng/ml = µg/l	282	226	338	28.0	56.0	Roche Modular E170 /Cobas e601/602
	ng/ml = µg/l	225	180	270	22.5	45.0	Shenzhen YHLO iFlash Series
	ng/ml = µg/l	200	160	240	20.0	40.0	Siemens Atellica IM
	ng/ml = µg/l	208	166	250	21.0	42.0	Siemens Centaur
	ng/ml = µg/l	263	210	316	26.5	53.0	Siemens Dimension
	ng/ml = µg/l	226	181	271	22.5	45.0	Siemens/DPC Immulite 2000/2500
	ng/ml = µg/l	187	150	224	18.5	37.0	TOSOH AIA Series
	ng/ml = µg/l	209	167	251	21.0	42.0	Tosoh AIA-CL Series
Folate	ng/ml	8.82	6.70	10.9	1.04	2.08	Abbott Alinity i
	nmol/l	20.0	15.2	24.8	2.40	4.80	
	ng/ml	8.33	6.33	10.3	0.985	1.97	Abbott Architect
	nmol/l	18.9	14.4	23.4	2.25	4.50	
	ng/ml	9.92	7.54	12.3	1.19	2.38	Beckman Access/LXi725
	nmol/l	22.5	17.1	27.9	2.70	5.40	
	ng/ml	9.66	7.34	12.0	1.17	2.34	Beckman Dxl 600/800 - A14208
	nmol/l	21.9	16.6	27.2	2.65	5.30	
	ng/ml	9.88	7.51	12.3	1.21	2.42	Beckman Dxl 600/800 - A98032
	nmol/l	22.4	17.0	27.8	2.70	5.40	
	ng/ml	9.92	8.33	11.5	0.790	1.58	Beckman Dxl 9000
nmol/l	22.5	18.9	26.1	1.80	3.60		
ng/ml	20.9	15.9	25.9	2.50	5.00	Mindray CL series (Excl. CL 900 series)	
nmol/l	47.4	36.0	58.8	5.70	11.4		
ng/ml	5.56	4.23	6.89	0.665	1.33	Ortho Vitros 3600/5600/ECi/XT/7600	
nmol/l	12.6	9.58	15.6	1.50	3.00		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Folate	ng/ml	10.2	7.75	12.7	1.25	2.50	Roche e402/e801
	nmol/l	23.2	17.6	28.8	2.80	5.60	
	ng/ml	21.9	16.6	27.2	2.65	5.30	Shenzhen YHLO iFlash Series
	nmol/l	49.7	37.8	61.6	5.95	11.9	
	ng/ml	15.3	11.6	19.0	1.85	3.70	Siemens Atellica IM
	nmol/l	34.7	26.4	43.0	4.15	8.30	
	ng/ml	16.3	12.4	20.2	1.95	3.90	Siemens Centaur (enhanced)
	nmol/l	36.9	28.0	45.8	4.45	8.90	
	ng/ml	5.03	3.82	6.24	0.605	1.21	Siemens Dimension
	nmol/l	11.4	8.66	14.1	1.35	2.70	
	ng/ml	6.48	4.92	8.04	0.780	1.56	Siemens/DPC Immulite 2000
	nmol/l	14.7	11.2	18.2	1.75	3.50	
	ng/ml	26.9	20.4	33.4	3.25	6.50	Tosoh AIA-CL Series
	nmol/l	60.9	46.3	75.5	7.30	14.6	
Free T3	ng/dl	1.74	1.31	2.17	0.215	0.430	Abbott Alinity, 2 point cal
	pg/ml	17.4	13.1	21.7	2.15	4.30	
	pmol/l	26.8	20.1	33.5	3.35	6.70	
	ng/dl	1.73	1.30	2.16	0.215	0.430	Abbott Alinity, 6 point cal
	pg/ml	17.3	13.0	21.6	2.15	4.30	
	pmol/l	26.6	20.0	33.2	3.30	6.60	
	ng/dl	1.72	1.29	2.15	0.215	0.430	Abbott Architect, 2 point cal
	pg/ml	17.2	12.9	21.5	2.15	4.30	
	pmol/l	26.4	19.8	33.0	3.30	6.60	
	ng/dl	1.70	1.28	2.12	0.210	0.420	Abbott Architect, 6 point cal
	pg/ml	17.0	12.8	21.2	2.10	4.20	
	pmol/l	26.1	19.6	32.6	3.25	6.50	
	ng/dl	1.24	0.930	1.55	0.155	0.310	Beckman Access/LXi725
	pg/ml	12.4	9.30	15.5	1.55	3.10	
	pmol/l	19.1	14.3	23.9	2.40	4.80	
	ng/dl	1.14	0.855	1.43	0.145	0.290	Beckman Dxl 600/800
	pg/ml	11.4	8.55	14.3	1.45	2.90	
	pmol/l	17.5	13.1	21.9	2.20	4.40	
ng/dl	1.24	0.930	1.55	0.155	0.310	Beckman Dxl 9000	
pg/ml	12.4	9.30	15.5	1.55	3.10		
pmol/l	19.1	14.3	23.9	2.40	4.80		
ng/dl	1.53	1.15	1.91	0.190	0.380	BioMerieux VIDAS	
pg/ml	15.4	11.6	19.2	1.90	3.80		
pmol/l	23.6	17.7	29.5	2.95	5.90		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T3	ng/dl	2.09	1.57	2.61	0.260	0.520	DiaSorin Liaison XL
	pg/ml	20.9	15.7	26.1	2.60	5.20	
	pmol/l	32.1	24.1	40.1	4.00	8.00	
	ng/dl	1.85	1.39	2.31	0.230	0.460	Fujirebio Lumipulse G Series
	pg/ml	18.5	13.9	23.1	2.30	4.60	
	pmol/l	28.4	21.3	35.5	3.55	7.10	
	ng/dl	2.03	1.52	2.54	0.255	0.510	J. Mitra CLIA - 181
	pg/ml	20.3	15.2	25.4	2.55	5.10	
	pmol/l	31.2	23.4	39.0	3.90	7.80	
	ng/dl	2.07	1.55	2.59	0.260	0.520	J. Mitra CLIA - 2000
	pg/ml	20.7	15.5	25.9	2.60	5.20	
	pmol/l	31.8	23.9	39.7	3.95	7.90	
	ng/dl	1.61	1.21	2.01	0.200	0.400	Lifotronic eCL
	pg/ml	16.1	12.1	20.1	2.00	4.00	
	pmol/l	24.7	18.5	30.9	3.10	6.20	
	ng/dl	1.42	1.07	1.77	0.175	0.350	Mindray CL 8/6/2/12/1000i Ref: FT3 11X
	pg/ml	14.3	10.7	17.9	1.80	3.60	
	pmol/l	21.9	16.4	27.4	2.75	5.50	
	ng/dl	1.40	1.05	1.75	0.175	0.350	Mindray CL 900i Ref: FT3 11X
	pg/ml	14.0	10.5	17.5	1.75	3.50	
	pmol/l	21.5	16.1	26.9	2.70	5.40	
	ng/dl	2.28	1.71	2.85	0.285	0.570	Ortho Vitros 3600/5600/ECi/XT 7600
	pg/ml	22.8	17.1	28.5	2.85	5.70	
	pmol/l	35.0	26.3	43.7	4.35	8.70	
ng/dl	1.77	1.33	2.21	0.220	0.440	Roche Cobas 4000/e411	
pg/ml	17.8	13.4	22.2	2.20	4.40		
pmol/l	27.3	20.5	34.1	3.40	6.80		
ng/dl	1.76	1.32	2.20	0.220	0.440	Roche Cobas e402/e801	
pg/ml	17.6	13.2	22.0	2.20	4.40		
pmol/l	27.1	20.3	33.9	3.40	6.80		
ng/dl	1.82	1.37	2.27	0.225	0.450	Roche Cobas e601/ 602	
pg/ml	18.2	13.7	22.7	2.25	4.50		
pmol/l	28.0	21.0	35.0	3.50	7.00		
ng/dl	1.79	1.34	2.24	0.225	0.450	Roche Elecsys	
pg/ml	17.9	13.4	22.4	2.25	4.50		
pmol/l	27.5	20.6	34.4	3.45	6.90		
ng/dl	1.31	0.983	1.64	0.165	0.330	Shenzhen YHLO iFlash Series	
pg/ml	13.1	9.83	16.4	1.65	3.30		
pmol/l	20.1	15.1	25.1	2.50	5.00		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T3	ng/dl	1.57	1.18	1.96	0.195	0.390	Siemens Atellica IM
	pg/ml	15.8	11.9	19.7	1.95	3.90	
	pmol/l	24.2	18.2	30.2	3.00	6.00	
	ng/dl	1.45	1.09	1.81	0.180	0.360	Siemens Centaur
	pg/ml	14.5	10.9	18.1	1.80	3.60	
	pmol/l	22.3	16.7	27.9	2.80	5.60	
	ng/dl	2.00	1.50	2.50	0.250	0.500	Siemens Dimension Exl LOCI
	pg/ml	20.0	15.0	25.0	2.50	5.00	
	pmol/l	30.7	23.0	38.4	3.85	7.70	
	ng/dl	1.02	0.765	1.28	0.130	0.260	Siemens/DPC Immulite 2000/2500
	pg/ml	10.2	7.65	12.8	1.30	2.60	
	pmol/l	15.7	11.8	19.6	1.95	3.90	
	ng/dl	1.63	1.22	2.04	0.205	0.410	Sysex HISCL Series
	pg/ml	16.3	12.2	20.4	2.05	4.10	
	pmol/l	25.1	18.8	31.4	3.15	6.30	
	ng/dl	2.48	1.86	3.10	0.310	0.620	TOSOH AIA Series
	pg/ml	24.8	18.6	31.0	3.10	6.20	
	pmol/l	38.1	28.6	47.6	4.75	9.50	
ng/dl	1.79	1.34	2.24	0.225	0.450	Tosoh AIA-CL Series	
pg/ml	17.9	13.4	22.4	2.25	4.50		
pmol/l	27.5	20.6	34.4	3.45	6.90		
Free T4	ng/dl	3.57	2.68	4.46	0.445	0.890	Abbott Alinity i
	pg/ml	35.7	26.8	44.6	4.45	8.90	
	pmol/l	45.8	34.4	57.2	5.70	11.4	
	ng/dl	3.80	2.85	4.75	0.475	0.950	Abbott Architect
	pg/ml	38.0	28.5	47.5	4.75	9.50	
	pmol/l	48.7	36.5	60.9	6.10	12.2	
	ng/dl	3.90	2.93	4.87	0.485	0.970	Beckman Access/LXi725
	pg/ml	39.0	29.3	48.7	4.85	9.70	
	pmol/l	50.0	37.5	62.5	6.25	12.5	
	ng/dl	4.14	3.11	5.17	0.515	1.03	Beckman Dxl 600/800
	pg/ml	41.4	31.1	51.7	5.15	10.3	
	pmol/l	53.1	39.8	66.4	6.65	13.3	
	ng/dl	3.90	2.93	4.87	0.485	0.970	Beckman Dxl 9000
	pg/ml	39.0	29.3	48.7	4.85	9.70	
	pmol/l	50.0	37.5	62.5	6.25	12.5	
	ng/dl	5.98	4.49	7.47	0.745	1.49	bioMerieux, VIDAS-FT4N Kit
	pg/ml	59.8	44.9	74.7	7.45	14.9	
	pmol/l	76.7	57.5	95.9	9.60	19.2	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	ng/dl	5.82	4.37	7.27	0.725	1.45	bioMerieux, VIDIA
	pg/ml	58.2	43.7	72.7	7.25	14.5	
	pmol/l	74.6	56.0	93.2	9.30	18.6	
	ng/dl	7.13	5.35	8.91	0.890	1.78	DiaSorin Liaison
	pg/ml	71.3	53.5	89.1	8.90	17.8	
	pmol/l	91.4	68.6	114	11.3	22.6	
	ng/dl	8.27	6.20	10.3	1.02	2.03	DiaSorin Liaison XL
	pg/ml	82.7	62.0	103	10.2	20.3	
	pmol/l	106	79.5	133	13.5	27.0	
	ng/dl	4.80	3.60	6.00	0.600	1.20	Fujirebio Lumipulse G Series
	pg/ml	48.0	36.0	60.0	6.00	12.0	
	pmol/l	61.6	46.2	77.0	7.70	15.4	
	ng/dl	3.42	2.57	4.27	0.425	0.850	Immunotech RIA
	pg/ml	34.2	25.7	42.7	4.25	8.50	
	pmol/l	43.8	32.9	54.7	5.45	10.9	
	ng/dl	5.05	3.79	6.31	0.630	1.26	J. Mitra CLIA - 181
	pg/ml	50.5	37.9	63.1	6.30	12.6	
	pmol/l	64.7	48.5	80.9	8.10	16.2	
	ng/dl	5.25	3.94	6.56	0.655	1.31	J. Mitra CLIA - 2000
	pg/ml	52.5	39.4	65.6	6.55	13.1	
	pmol/l	67.3	50.5	84.1	8.40	16.8	
	ng/dl	2.86	2.15	3.57	0.355	0.710	Lifotronic eCL
	pg/ml	28.6	21.5	35.7	3.55	7.10	
	pmol/l	36.7	27.5	45.9	4.60	9.20	
ng/dl	3.54	2.66	4.42	0.440	0.880	Maccura I Series	
pg/ml	35.4	26.6	44.2	4.40	8.80		
pmol/l	45.4	34.1	56.7	5.65	11.3		
ng/dl	5.57	4.18	6.96	0.695	1.39	Mindray CL 8/6/2/12/1000i Ref: FT4 11X	
pg/ml	55.7	41.8	69.6	6.95	13.9		
pmol/l	71.4	53.6	89.2	8.90	17.8		
ng/dl	5.31	3.98	6.64	0.665	1.33	Mindray CL 900i Ref: FT4 11X	
pg/ml	53.1	39.8	66.4	6.65	13.3		
pmol/l	68.1	51.1	85.1	8.50	17.0		
ng/dl	7.00	5.25	8.75	0.875	1.75	Ortho Vitros 3600/5600/ECi/XT/7600	
pg/ml	70.0	52.5	87.5	8.75	17.5		
pmol/l	89.7	67.3	112	11.2	22.3		
ng/dl	5.12	3.84	6.40	0.640	1.28	Roche Cobas 4000/e411	
pg/ml	51.2	38.4	64.0	6.40	12.8		
pmol/l	65.7	49.3	82.1	8.20	16.4		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	ng/dl	5.42	4.07	6.77	0.675	1.35	Roche Cobas e402/e801
	pg/ml	54.2	40.7	67.7	6.75	13.5	
	pmol/l	69.5	52.1	86.9	8.70	17.4	
	ng/dl	5.19	3.89	6.49	0.650	1.30	Roche Cobas e601/ 602
	pg/ml	51.9	38.9	64.9	6.50	13.0	
	pmol/l	66.6	50.0	83.2	8.30	16.6	
	ng/dl	5.38	4.04	6.72	0.670	1.34	Roche Elecsys
	pg/ml	53.8	40.4	67.2	6.70	13.4	
	pmol/l	69.0	51.8	86.2	8.60	17.2	
	ng/dl	3.43	2.57	4.29	0.430	0.860	Shenzhen YHLO iFlash Series
	pg/ml	34.3	25.7	42.9	4.30	8.60	
	pmol/l	44.0	33.0	55.0	5.50	11.0	
	ng/dl	4.33	3.25	5.41	0.540	1.08	Siemens Atellica IM
	pg/ml	43.3	32.5	54.1	5.40	10.8	
	pmol/l	55.5	41.6	69.4	6.95	13.9	
	ng/dl	4.13	3.10	5.16	0.515	1.03	Siemens Centaur
	pg/ml	41.3	31.0	51.6	5.15	10.3	
	pmol/l	53.0	39.8	66.2	6.60	13.2	
	ng/dl	6.26	4.70	7.82	0.780	1.56	Siemens Dimension Exl LOCI
	pg/ml	62.6	47.0	78.2	7.80	15.6	
	pmol/l	80.2	60.2	100	9.90	19.8	
	ng/dl	5.29	3.97	6.61	0.660	1.32	Siemens/DPC Immulite 1000
	pg/ml	52.9	39.7	66.1	6.60	13.2	
	pmol/l	67.8	50.9	84.7	8.45	16.9	
ng/dl	5.67	4.25	7.09	0.710	1.42	Siemens/DPC Immulite 2000/2500	
pg/ml	56.7	42.5	70.9	7.10	14.2		
pmol/l	72.7	54.5	90.9	9.10	18.2		
ng/dl	6.03	4.52	7.54	0.755	1.51	Sysmex HISCL Series	
pg/ml	60.3	45.2	75.4	7.55	15.1		
pmol/l	77.3	58.0	96.6	9.65	19.3		
ng/dl	5.58	4.19	6.97	0.695	1.39	TOSOH AIA Series	
pg/ml	55.8	41.9	69.7	6.95	13.9		
pmol/l	71.5	53.6	89.4	8.95	17.9		
ng/dl	4.99	3.74	6.24	0.625	1.25	Tosoh AIA-CL Series	
pg/ml	49.9	37.4	62.4	6.25	12.5		
pmol/l	64.0	48.0	80.0	8.00	16.0		
FSH	mU/ml	50.5	40.4	60.6	5.05	10.1	Abbott Alinity i
	mU/ml	51.6	41.3	61.9	5.15	10.3	Abbott Architect
	mU/ml	59.7	47.8	71.6	5.95	11.9	Beckman Access/LXi725

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
FSH	mU/ml	61.9	49.5	74.3	6.20	12.4	Beckman Dxl 600/800
	mU/ml	59.7	47.8	71.6	5.95	11.9	Beckman Dxl 9000
	mU/ml	68.8	55.0	82.6	6.90	13.8	bioMerieux, VIDAS
	mU/ml	75.9	60.7	91.1	7.60	15.2	DiaSorin Liaison
	mU/ml	85.9	68.7	103	8.55	17.1	DiaSorin Liaison XL
	mU/ml	54.2	43.4	65.0	5.40	10.8	J. Mitra CLIA - 181
	mU/ml	55.3	44.2	66.4	5.55	11.1	J. Mitra CLIA - 2000
	mU/ml	53.7	43.0	64.4	5.35	10.7	Lifotronic eCL
	mU/ml	53.1	42.5	63.7	5.30	10.6	Maccura I Series
	mU/ml	63.4	50.7	76.1	6.35	12.7	Mindray CL 8/6/2/12/1000i <= Lot 231101
	mU/ml	44.3	35.4	53.2	4.45	8.90	Ortho Vitros 3600/5600/ECi/XT/7600
	mU/ml	56.0	44.8	67.2	5.60	11.2	Roche Cobas 4000/e411
	mU/ml	52.8	42.2	63.4	5.30	10.6	Roche Cobas e402/e801
	mU/ml	52.6	42.1	63.1	5.25	10.5	Roche Cobas e601/602
	mU/ml	54.2	43.4	65.0	5.40	10.8	Roche Elecsys
	mU/ml	51.1	40.9	61.3	5.10	10.2	Shenzhen YHLO iFlash Series
	mU/ml	71.4	57.1	85.7	7.15	14.3	Siemens Atellica IM
	mU/ml	71.4	57.1	85.7	7.15	14.3	Siemens Centaur
	mU/ml	54.3	43.4	65.2	5.45	10.9	Siemens/DPC Immulite 2000/2500
	mU/ml	59.3	47.4	71.2	5.95	11.9	TOSOH AIA Series
mU/ml	51.6	41.3	61.9	5.15	10.3	Tosoh AIA-CL Series	
Gentamicin	µg/ml	3.11	2.49	3.73	0.310	0.620	Abbott Alinity (PETINA)
	µmol/l	6.51	5.21	7.81	0.650	1.30	
	µg/ml	2.69	2.15	3.23	0.270	0.540	Abbott Architect (CMIA)
	µmol/l	5.63	4.50	6.76	0.565	1.13	
	µg/ml	2.64	2.11	3.17	0.265	0.530	Cobas c501/502/701/702/311 CEDIA
	µmol/l	5.52	4.42	6.62	0.550	1.10	
	µg/ml	2.44	1.95	2.93	0.245	0.490	Cobas c501/502/701/702/311 KIMS
	µmol/l	5.11	4.09	6.13	0.510	1.02	
Growth Hormone (GH)	ng/ml	10.3	8.24	12.4	1.05	2.10	Beckman Access/LXi725
	µU/ml	30.9	24.7	37.1	3.10	6.20	
	ng/ml	10.6	8.48	12.7	1.05	2.10	Beckman Dxl 600/800
	µU/ml	31.9	25.5	38.3	3.20	6.40	
Growth Hormone (GH)	ng/ml	10.3	8.24	12.4	1.05	2.10	Beckman Dxl 9000
	µU/ml	30.9	24.7	37.1	3.10	6.20	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Growth Hormone (GH)	ng/ml	12.9	10.3	15.5	1.30	2.60	Beckman/Immunotech IRMA
	µU/ml	38.6	30.9	46.3	3.85	7.70	
	ng/ml	12.3	9.84	14.8	1.25	2.50	DiaSorin Liaison XL
	µU/ml	36.8	29.4	44.2	3.70	7.40	
	ng/ml	13.5	10.8	16.2	1.35	2.70	J. Mitra CLIA - 181
	µU/ml	40.5	32.4	48.6	4.05	8.10	
	ng/ml	13.7	11.0	16.4	1.35	2.70	J. Mitra CLIA - 2000
	µU/ml	41.1	32.9	49.3	4.10	8.20	
	ng/ml	13.3	10.6	16.0	1.35	2.70	Roche Cobas 4000/e411
	µU/ml	40.0	32.0	48.0	4.00	8.00	
	ng/ml	12.5	10.0	15.0	1.25	2.50	Roche Cobas e402/e801
	µU/ml	37.6	30.1	45.1	3.75	7.50	
	ng/ml	12.7	10.2	15.2	1.25	2.50	Roche Cobas e601/ 602
	µU/ml	38.2	30.6	45.8	3.80	7.60	
	ng/ml	12.3	9.84	14.8	1.25	2.50	Roche Elecsys
	µU/ml	36.8	29.4	44.2	3.70	7.40	
	ng/ml	13.3	10.6	16.0	1.35	2.70	Siemens/DPC Immulite 2000/2500
	µU/ml	40.0	32.0	48.0	4.00	8.00	
ng/ml	11.8	9.44	14.2	1.20	2.40	Tosoh AIA-CL Series	
µU/ml	35.5	28.4	42.6	3.55	7.10		
Immunoglobulin E	KIU/I = IU/ml	427	342	512	42.5	85.0	Abbott Alinity
	KIU/I = IU/ml	442	354	530	44.0	88.0	Abbott Architect
	KIU/I = IU/ml	497	398	596	49.5	99.0	Beckman AU analysers
	KIU/I = IU/ml	461	369	553	46.0	92.0	bioMerieux, VIDAS
	KIU/I = IU/ml	515	412	618	51.5	103	Boditech Med Inc i-CHROMA
	KIU/I = IU/ml	615	492	738	61.5	123	J. Mitra CLIA - 181

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Immunoglobulin E	KIU/l = IU/ml	618	494	742	62.0	124	J. Mitra CLIA - 2000
	KIU/l = IU/ml	470	376	564	47.0	94.0	Phadia Immucap instruments
	KIU/l = IU/ml	538	430	646	54.0	108	Roche Cobas 4000/e411
	KIU/l = IU/ml	503	402	604	50.5	101	Roche Cobas e402/e801
	KIU/l = IU/ml	512	410	614	51.0	102	Roche Cobas e601/ 602
	KIU/l = IU/ml	511	409	613	51.0	102	Roche Elecsys
	KIU/l = IU/ml	556	445	667	55.5	111	Siemens Atellica IM
	KIU/l = IU/ml	513	410	616	51.5	103	Siemens Centaur
	KIU/l = IU/ml	541	433	649	54.0	108	Siemens/DPC Immulite 1000
	KIU/l = IU/ml	470	376	564	47.0	94.0	Siemens/DPC Immulite 2000/2500
	KIU/l = IU/ml	457	366	548	45.5	91.0	Tosoh
KIU/l = IU/ml	453	362	544	45.5	91.0	Tosoh AIA-CL Series	
Insulin	mU/l	19.4	14.6	24.2	2.40	4.80	Abbott Alinity i
	µU/ml	19.4	14.6	24.2	2.40	4.80	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Insulin	mU/l	20.5	15.4	25.6	2.55	5.10	Abbott Architect
	µU/ml	20.5	15.4	25.6	2.55	5.10	
	mU/l	24.3	18.2	30.4	3.05	6.10	Beckman Access/LXi725
	µU/ml	24.3	18.2	30.4	3.05	6.10	
	mU/l	23.9	17.9	29.9	3.00	6.00	Beckman Dxl 600/800
	µU/ml	23.9	17.9	29.9	3.00	6.00	
	mU/l	24.3	19.4	29.2	2.45	4.90	Beckman Dxl 9000
	µU/ml	24.3	19.4	29.2	2.45	4.90	
	mU/l	32.1	24.1	40.1	4.00	8.00	DiaSorin Liaison
	µU/ml	32.1	24.1	40.1	4.00	8.00	
	mU/l	33.6	25.2	42.0	4.20	8.40	DiaSorin Liaison XL
	µU/ml	33.6	25.2	42.0	4.20	8.40	
	mU/l	25.5	20.4	30.6	2.55	5.10	J. Mitra CLIA - 181
	µU/ml	25.5	20.4	30.6	2.55	5.10	
	mU/l	26.9	21.5	32.3	2.70	5.40	J. Mitra CLIA - 2000
	µU/ml	26.9	21.5	32.3	2.70	5.40	
	mU/l	27.6	20.7	34.5	3.45	6.90	Lifotronic eCL
	µU/ml	27.6	20.7	34.5	3.45	6.90	
	mU/l	28.1	21.1	35.1	3.50	7.00	Mindray CL series (Excl. CL 900 series)
	µU/ml	28.1	21.1	35.1	3.50	7.00	
	mU/l	24.6	18.5	30.7	3.05	6.10	Ortho Vitros 3600/5600/ECi/XT 7600
	µU/ml	24.6	18.5	30.7	3.05	6.10	
	mU/l	28.1	21.1	35.1	3.50	7.00	Roche Cobas 4000/e411
	µU/ml	28.1	21.1	35.1	3.50	7.00	
	mU/l	28.2	21.2	35.2	3.50	7.00	Roche Cobas 6000/8000
	µU/ml	28.2	21.2	35.2	3.50	7.00	
	mU/l	28.2	21.2	35.2	3.50	7.00	Roche Elecsys
	µU/ml	28.2	21.2	35.2	3.50	7.00	
	mU/l	23.0	18.4	27.6	2.30	4.60	Shenzhen YHLO iFlash Series
	µU/ml	23.0	18.4	27.6	2.30	4.60	
mU/l	27.4	20.6	34.2	3.40	6.80	Siemens Atellica IM	
µU/ml	27.4	20.6	34.2	3.40	6.80		
mU/l	28.1	21.1	35.1	3.50	7.00	Siemens Centaur XP/Classic	
µU/ml	28.1	21.1	35.1	3.50	7.00		
mU/l	13.8	10.4	17.2	1.70	3.40	Siemens/DPC Immulite 2000	
µU/ml	13.8	10.4	17.2	1.70	3.40		
mU/l	27.1	21.7	32.5	2.70	5.40	TOSOH AIA Series	
µU/ml	27.1	21.7	32.5	2.70	5.40		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Insulin	mU/l	27.1	21.7	32.5	2.70	5.40	Tosoh AIA-CL Series
	µU/ml	27.1	21.7	32.5	2.70	5.40	
Luteinising Hormone (LH)	mU/ml	43.5	34.8	52.2	4.35	8.70	Abbott Alinity i
	mU/ml	43.1	34.5	51.7	4.30	8.60	Abbott Architect
	mU/ml	46.7	37.4	56.0	4.65	9.30	Beckman Access/LXi725
	mU/ml	47.3	37.8	56.8	4.75	9.50	Beckman Dxl 600/800
	mU/ml	46.7	37.4	56.0	4.65	9.30	Beckman Dxl 9000
	mU/ml	50.9	40.7	61.1	5.10	10.2	bioMerieux, VIDAS
	mU/ml	81.4	65.1	97.7	8.15	16.3	DiaSorin Liaison XL
	mU/ml	77.2	61.8	92.6	7.70	15.4	Finecare
	mU/ml	55.5	44.4	66.6	5.55	11.1	J. Mitra CLIA - 181
	mU/ml	55.0	44.0	66.0	5.50	11.0	J. Mitra CLIA - 2000
	mU/ml	58.8	47.0	70.6	5.90	11.8	Maccura I Series
	mU/ml	63.5	50.8	76.2	6.35	12.7	Mindray CL series (Excl. CL 900 series)
	mU/ml	55.9	44.7	67.1	5.60	11.2	Ortho Vitros 3600/5600/ECi/XT 7600
	mU/ml	58.3	46.6	70.0	5.85	11.7	Roche Cobas 4000/e411
	mU/ml	55.2	44.2	66.2	5.50	11.0	Roche Cobas e402/e801
	mU/ml	56.5	45.2	67.8	5.65	11.3	Roche Cobas e601/ 602
	mU/ml	57.9	46.3	69.5	5.80	11.6	Roche Elecsys
	mU/ml	52.9	42.3	63.5	5.30	10.6	Siemens Atellica IM
	mU/ml	48.9	39.1	58.7	4.90	9.80	Siemens Centaur
	mU/ml	64.2	51.4	77.0	6.40	12.8	Siemens/DPC Immulite 2000
mU/ml	53.3	42.6	64.0	5.35	10.7	TOSOH AIA Series	
mU/ml	48.8	39.0	58.6	4.90	9.80	Tosoh AIA-CL Series	
Oestradiol	pg/ml	336	269	403	33.5	67.0	Abbott Alinity i
	pmol/l	1234	987	1481	124	247	
	pg/ml	344	275	413	34.5	69.0	Abbott Architect
	pmol/l	1264	1011	1517	127	253	
	pg/ml	463	370	556	46.5	93.0	Beckman Access/LXi725
	pmol/l	1703	1362	2044	171	341	
	pg/ml	478	382	574	48.0	96.0	Beckman Access/LXi725 Sensitive B84493
	pmol/l	1756	1405	2107	176	351	
	pg/ml	444	355	533	44.5	89.0	Beckman Dxl 600/800
	pmol/l	1632	1306	1958	163	326	
pg/ml	450	360	540	45.0	90.0	Beckman Dxl 600/800 Sensitive B84493	
pmol/l	1653	1322	1984	166	331		
pg/ml	463	370	556	46.5	93.0	Beckman Dxl 9000	
pmol/l	1703	1362	2044	171	341		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Oestradiol	pg/ml	988	790	1186	99.0	198	bioMerieux, VIDAS
	pmol/l	3632	2906	4358	363	726	
	pg/ml	319	255	383	32.0	64.0	DiaSorin Liaison XL
	pmol/l	1172	938	1406	117	234	
	pg/ml	431	345	517	43.0	86.0	J. Mitra CLIA - 181
	pmol/l	1586	1269	1903	159	317	
	pg/ml	435	348	522	43.5	87.0	J. Mitra CLIA - 2000
	pmol/l	1601	1281	1921	160	320	
	pg/ml	626	501	751	62.5	125	Mindray CL 8/6/2/12/1000i <= Lot 230501
	pmol/l	2302	1842	2762	230	460	
	pg/ml	859	687	1031	86.0	172	Ortho Vitros 3600/5600/ECi/XT 7600
	pmol/l	3158	2526	3790	316	632	
	pg/ml	407	326	488	40.5	81.0	Roche Cobas 4000/e411 (Estradiol II)
	pmol/l	1498	1198	1798	150	300	
	pg/ml	411	329	493	41.0	82.0	Roche Cobas 4000/e411 (Estradiol III)
	pmol/l	1510	1208	1812	151	302	
	pg/ml	427	342	512	42.5	85.0	Roche Cobas e402/e801 (Estradiol III)
	pmol/l	1569	1255	1883	157	314	
	pg/ml	412	330	494	41.0	82.0	Roche Cobas e601/ 602 (Estradiol III)
	pmol/l	1513	1210	1816	152	303	
	pg/ml	412	330	494	41.0	82.0	Roche Cobas e601/ 602 Estradiol II
	pmol/l	1514	1211	1817	152	303	
	pg/ml	416	333	499	41.5	83.0	Roche Elecsys (Estradiol II)
	pmol/l	1528	1222	1834	153	306	
	pg/ml	411	329	493	41.0	82.0	Roche Elecsys (Estradiol III)
	pmol/l	1510	1208	1812	151	302	
	pg/ml	567	454	680	56.5	113	Shenzhen YHLO iFlash Series
	pmol/l	2083	1666	2500	209	417	
	pg/ml	788	630	946	79.0	158	Siemens Atellica IM
	pmol/l	2897	2318	3476	290	579	
pg/ml	751	601	901	75.0	150	Siemens Centaur	
pmol/l	2762	2210	3314	276	552		
pg/ml	771	617	925	77.0	154	Siemens Centaur XP/XPT (eE2)	
pmol/l	2836	2269	3403	284	567		
pg/ml	749	599	899	75.0	150	Siemens/DPC Immulite 2000/2500	
pmol/l	2754	2203	3305	276	551		
pg/ml	609	487	731	61.0	122	Tosoh AIA Series (E2)	
pmol/l	2240	1792	2688	224	448		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Oestradiol	pg/ml	619	495	743	62.0	124	Tosoh AIA Series (iE2-hsE2)
	pmol/l	2277	1822	2732	228	455	
	pg/ml	468	374	562	47.0	94.0	Tosoh AIA-CL Series (E2)
	pmol/l	1721	1377	2065	172	344	
Paracetamol	mg/l	73.0	58.4	87.6	7.30	14.6	Abbott Alinity
	mmol/l	0.482	0.386	0.578	0.048	0.096	
	mg/l	71.5	57.2	85.8	7.15	14.3	Beckman AU Instruments
	mmol/l	0.472	0.378	0.566	0.047	0.094	
	mg/l	73.6	58.9	88.3	7.35	14.7	EMIT
	mmol/l	0.486	0.389	0.583	0.049	0.097	
	mg/l	69.4	55.5	83.3	6.95	13.9	Roche Cobas C303/501/502/503/701/702
	mmol/l	0.458	0.366	0.550	0.046	0.092	
Phenobarbital	mg/l	69.2	55.4	83.0	6.90	13.8	Siemens Atellica CH
	mmol/l	0.457	0.366	0.548	0.046	0.091	
	µg/ml	23.4	18.7	28.1	2.35	4.70	Abbott Alinity (PETINA)
	µmol/l	101	80.8	121	10.0	20.0	
	µg/ml	26.2	21.0	31.4	2.60	5.20	Abbott Architect (CMIA)
	µmol/l	113	90.4	136	11.5	23.0	
	µg/ml	24.1	19.3	28.9	2.40	4.80	Beckman AU Instruments
	µmol/l	104	83.2	125	10.5	21.0	
	µg/ml	25.3	20.2	30.4	2.55	5.10	EMIT
	µmol/l	109	87.2	131	11.0	22.0	
	µg/ml	24.1	19.3	28.9	2.40	4.80	Microgenics CEDIA assay
	µmol/l	104	83.2	125	10.5	21.0	
Phenytoin	µg/ml	26.0	20.8	31.2	2.60	5.20	Roche Cobas C303/501/502/503/701
	µmol/l	112	89.6	134	11.0	22.0	
	µg/ml	25.1	20.1	30.1	2.50	5.00	Siemens Atellica CH
	µmol/l	108	86.4	130	11.0	22.0	
	µg/ml	26.0	20.8	31.2	2.60	5.20	Siemens/DPC Immulite 2000/2500
	µmol/l	112	89.6	134	11.0	22.0	
	µg/ml	22.9	18.3	27.5	2.30	4.60	Abbott Alinity
	µmol/l	90.6	72.5	109	9.20	18.4	
	µg/ml	21.0	16.8	25.2	2.10	4.20	Abbott Architect
	µmol/l	83.1	66.5	99.7	8.30	16.6	
Phenytoin	µg/ml	21.6	17.3	25.9	2.15	4.30	Beckman AU Instruments
	µmol/l	85.5	68.4	103	8.75	17.5	
	µg/ml	20.8	16.6	25.0	2.10	4.20	EMIT
	µmol/l	82.5	66.0	99.0	8.25	16.5	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Phenytoin	µg/ml	20.9	16.7	25.1	2.10	4.20	Roche Cobas 6000/8000	
	µmol/l	82.8	66.2	99.4	8.30	16.6		
	µg/ml	23.1	18.5	27.7	2.30	4.60	Siemens Atellica CH	
	µmol/l	91.5	73.2	110	9.25	18.5		
	µg/ml	22.2	17.8	26.6	2.20	4.40	Siemens Dimension	
	µmol/l	87.8	70.2	105	8.60	17.2		
	µg/ml	22.4	17.9	26.9	2.25	4.50	Siemens/DPC Immulite 2000/2500	
	µmol/l	88.9	71.1	107	9.05	18.1		
	µg/ml	21.4	17.1	25.7	2.15	4.30	Vitros	
	µmol/l	84.9	67.9	102	8.55	17.1		
	Progesterone	ng/ml	24.3	19.4	29.2	2.45	4.90	Abbott Alinity i
		nmol/l	77.6	62.1	93.1	7.75	15.5	
ng/ml		25.6	20.5	30.7	2.55	5.10	Abbott Architect	
nmol/l		81.8	65.4	98.2	8.20	16.4		
ng/ml		29.7	23.8	35.6	2.95	5.90	Beckman Access Prog. Cal 33555	
nmol/l		95.0	76.0	114	9.50	19.0		
ng/ml		28.6	22.9	34.3	2.85	5.70	Beckman Access Prog.DE Cal. A80773	
nmol/l		91.5	73.2	110	9.25	18.5		
ng/ml		29.6	23.7	35.5	2.95	5.90	Beckman DXI Prog. Cal 33555	
nmol/l		94.7	75.8	114	9.65	19.3		
ng/ml		29.1	23.3	34.9	2.90	5.80	Beckman DXI Prog.DE Cal. A80773	
nmol/l		92.9	74.3	112	9.55	19.1		
ng/ml		33.8	27.0	40.6	3.40	6.80	bioMerieux, VIDAS (<= lot 1009311690)	
nmol/l		108	86.4	130	11.0	22.0		
ng/ml		35.4	28.3	42.5	3.55	7.10	bioMerieux, VIDAS (>= lot 1009323920)	
nmol/l		113	90.4	136	11.5	23.0		
ng/ml		24.9	19.9	29.9	2.50	5.00	DiaSorin Liaison XL	
nmol/l		79.5	63.6	95.4	7.95	15.9		
ng/ml		28.1	22.5	33.7	2.80	5.60	J. Mitra CLIA - 181	
nmol/l		89.7	71.8	108	9.15	18.3		
ng/ml		27.6	22.1	33.1	2.75	5.50	J. Mitra CLIA - 2000	
nmol/l		88.1	70.5	106	8.95	17.9		
ng/ml		35.7	28.6	42.8	3.55	7.10	Mindray CL series (Excl. CL 900 series)	
nmol/l		114	91.2	137	11.5	23.0		
ng/ml	32.6	26.1	39.1	3.25	6.50	Ortho Vitros 3600/5600/ECi/XT 7600		
nmol/l	104	83.2	125	10.5	21.0			
ng/ml	29.1	23.3	34.9	2.90	5.80	Roche Cobas 4000/e411 (Prog. II)		
nmol/l	93.0	74.4	112	9.50	19.0			

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Progesterone	ng/ml	28.8	23.0	34.6	2.90	5.80	Roche Cobas 4000/e411 (Prog. III)
	nmol/l	92.0	73.6	110	9.00	18.0	
	ng/ml	28.9	23.1	34.7	2.90	5.80	Roche Cobas e402/e801 (Prog III)
	nmol/l	92.4	73.9	111	9.30	18.6	
	ng/ml	29.9	23.9	35.9	3.00	6.00	Roche Cobas e601/ 602 (Prog. II)
	nmol/l	95.5	76.4	115	9.75	19.5	
	ng/ml	30.5	24.4	36.6	3.05	6.10	Roche Cobas e601/ 602 (Prog. III)
	nmol/l	97.6	78.1	117	9.70	19.4	
	ng/ml	28.4	22.7	34.1	2.85	5.70	Roche Elecsys (Prog. II)
	nmol/l	90.7	72.6	109	9.15	18.3	
	ng/ml	29.1	23.3	34.9	2.90	5.80	Roche Elecsys (Prog. III)
	nmol/l	93.1	74.5	112	9.45	18.9	
	ng/ml	36.6	29.3	43.9	3.65	7.30	Shenzhen YHLO iFlash Series
	nmol/l	117	93.6	140	11.5	23.0	
	ng/ml	22.7	18.2	27.2	2.25	4.50	Siemens Atellica IM
	nmol/l	72.4	57.9	86.9	7.25	14.5	
	ng/ml	21.8	17.4	26.2	2.20	4.40	Siemens Centaur
	nmol/l	69.6	55.7	83.5	6.95	13.9	
	ng/ml	24.1	19.3	28.9	2.40	4.80	Siemens/DPC Immulite 2000/2500
	nmol/l	76.9	61.5	92.3	7.70	15.4	
ng/ml	33.2	26.6	39.8	3.30	6.60	TOSOH AIA Series	
nmol/l	106	84.8	127	10.5	21.0		
ng/ml	30.6	24.5	36.7	3.05	6.10	Tosoh AIA-CL Series	
nmol/l	97.9	78.3	118	10.1	20.1		
Prolactin	µIU/mL	1155	924	1386	116	231	Abbott Alinity i
	µIU/mL	1122	898	1346	112	224	Abbott Architect
	µIU/mL	856	685	1027	85.5	171	Beckman Access/LXi725
	µIU/mL	822	658	986	82.0	164	Beckman Dxl 600/800
	µIU/mL	856	685	1027	85.5	171	Beckman Dxl 9000
	µIU/mL	1091	873	1309	109	218	bioMerieux, VIDAS
	µIU/mL	1045	836	1254	105	209	DiaSorin Liaison XL
	µIU/mL	985	788	1182	98.5	197	Immunotech IRMA
	µIU/mL	1245	996	1494	125	249	J. Mitra CLIA - 181
	µIU/mL	1253	1002	1504	126	251	J. Mitra CLIA - 2000
	µIU/mL	917	734	1100	91.5	183	Lifotronic eCL
	µIU/mL	1209	967	1451	121	242	Maccura I Series
	µIU/mL	1058	846	1270	106	212	Mindray CL series (Excl. CL 900 series)
	µIU/mL	776	621	931	77.5	155	Ortho Vitros 3600/5600/ECi/XT 7600
	µIU/mL	1179	943	1415	118	236	Roche Cobas 4000/e411

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Prolactin	µIU/mL	1106	885	1327	111	221	Roche Cobas e402/e801 PRL II
	µIU/mL	1150	920	1380	115	230	Roche Cobas e601/ 602
	µIU/mL	1136	909	1363	114	227	Roche Elecsys
	µIU/mL	1149	919	1379	115	230	Roche Elecsys/E170/Cobas e601/602 PRLII
	µIU/mL	1251	1001	1501	125	250	Shenzhen YHLO iFlash Series
	µIU/mL	693	554	832	69.5	139	Siemens Atellica IM
	µIU/mL	700	560	840	70.0	140	Siemens Centaur
	µIU/mL	798	638	958	80.0	160	Siemens/DPC Immulite 2000/2500
	µIU/mL	896	717	1075	89.5	179	TOSOH AIA Series
	µIU/mL	1149	919	1379	115	230	Tosoh AIA-CL Series
PSA Free	ng/ml = µg/l	24.2	18.2	30.2	3.00	6.00	Abbott Alinity i
	ng/ml = µg/l	25.2	18.9	31.5	3.15	6.30	Abbott Architect
	ng/ml = µg/l	24.3	18.2	30.4	3.05	6.10	Beckman Access standardised to Hybritech
	ng/ml = µg/l	24.8	18.6	31.0	3.10	6.20	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	19.7	14.8	24.6	2.45	4.90	DiaSorin Liaison XL
	ng/ml = µg/l	30.0	22.5	37.5	3.75	7.50	Finecare
	ng/ml = µg/l	15.9	11.9	19.9	2.00	4.00	Immunotech IRMA
	ng/ml = µg/l	22.8	17.1	28.5	2.85	5.70	Mindray CL series (Excl. CL 900 series)
	ng/ml = µg/l	15.9	11.9	19.9	2.00	4.00	Ortho Vitros 3600/5600/ECi
	ng/ml = µg/l	16.6	12.5	20.7	2.05	4.10	Ortho Vitros 3600/5600/ECi PSA II/XT7600
	ng/ml = µg/l	20.1	15.1	25.1	2.50	5.00	Roche Cobas 4000/e411
	ng/ml = µg/l	18.6	14.0	23.2	2.30	4.60	Roche Cobas e402/e801
	ng/ml = µg/l	19.5	14.6	24.4	2.45	4.90	Roche Cobas e601/602
	ng/ml = µg/l	18.8	14.1	23.5	2.35	4.70	Roche Elecsys

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
PSA Free	ng/ml = µg/l	27.7	20.8	34.6	3.45	6.90	Shenzhen YHLO iFlash Series
	ng/ml = µg/l	23.7	17.8	29.6	2.95	5.90	Siemens Atellica IM
	ng/ml = µg/l	22.9	17.2	28.6	2.85	5.70	Siemens Centaur
	ng/ml = µg/l	19.5	14.6	24.4	2.45	4.90	Siemens/DPC Immulite 2000/2500
	ng/ml = µg/l	19.2	14.4	24.0	2.40	4.80	TOSOH AIA Series
	ng/ml = µg/l	25.1	18.8	31.4	3.15	6.30	Tosoh AIA-CL Series
PSA Total	ng/ml = µg/l	19.3	14.5	24.1	2.40	4.80	Abbott Alinity i
	ng/ml = µg/l	19.6	14.7	24.5	2.45	4.90	Abbott Architect
	ng/ml = µg/l	31.5	23.6	39.4	3.95	7.90	Beckman Access standard to WHO IRP96/670
	ng/ml = µg/l	31.3	23.5	39.1	3.90	7.80	Beckman Access standardised to Hybritech
	ng/ml = µg/l	23.2	17.4	29.0	2.90	5.80	Beckman DXI standard to WHO IRP96/670
	ng/ml = µg/l	30.7	23.0	38.4	3.85	7.70	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	24.0	18.0	30.0	3.00	6.00	bioMerieux, VIDAS
	ng/ml = µg/l	25.2	18.9	31.5	3.15	6.30	bioMerieux, Vidas TPSA
	ng/ml = µg/l	23.9	17.9	29.9	3.00	6.00	DiaSorin Liaison
	ng/ml = µg/l	26.1	19.6	32.6	3.25	6.50	DiaSorin Liaison XL
	ng/ml = µg/l	19.7	14.8	24.6	2.45	4.90	Immunotech IRMA
	ng/ml = µg/l	27.0	20.3	33.7	3.35	6.70	J. Mitra CLIA - 181
ng/ml = µg/l	27.4	20.6	34.2	3.40	6.80	J. Mitra CLIA - 2000	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
PSA Total	ng/ml = µg/l	26.2	19.7	32.7	3.25	6.50	Mindray CL 900i/920i/960i/980i
	ng/ml = µg/l	25.8	19.4	32.2	3.20	6.40	Mindray CL series (Excl. CL 900 series)
	ng/ml = µg/l	25.8	19.4	32.2	3.20	6.40	Ortho Vitros 3600/5600/ECi
	ng/ml = µg/l	25.9	19.4	32.4	3.25	6.50	Ortho Vitros 3600/5600/ECi PSA II/XT7600
	ng/ml = µg/l	28.0	21.0	35.0	3.50	7.00	Roche Cobas 4000/e411
	ng/ml = µg/l	26.1	19.6	32.6	3.25	6.50	Roche Cobas e402/e801
	ng/ml = µg/l	26.8	20.1	33.5	3.35	6.70	Roche Cobas e601/602
	ng/ml = µg/l	27.2	20.4	34.0	3.40	6.80	Roche Elecsys
	ng/ml = µg/l	39.8	29.9	49.7	4.95	9.90	Shenzhen YHLO iFlash Series
	ng/ml = µg/l	25.0	18.8	31.2	3.10	6.20	Siemens Atellica IM
	ng/ml = µg/l	24.4	18.3	30.5	3.05	6.10	Siemens Centaur
	ng/ml = µg/l	20.9	15.7	26.1	2.60	5.20	Siemens Dimension
	ng/ml = µg/l	22.9	17.2	28.6	2.85	5.70	Siemens Immulite 1000, Total PSA
	ng/ml = µg/l	21.8	16.4	27.2	2.70	5.40	Siemens Immulite 2000/2500, Total PSA
	ng/ml = µg/l	19.6	14.7	24.5	2.45	4.90	Sysmex HISCL Series
ng/ml = µg/l	17.7	13.3	22.1	2.20	4.40	TOSOH AIA Series	
ng/ml = µg/l	21.8	16.4	27.2	2.70	5.40	Tosoh AIA-CL Series	
Salicylate	mg/dl	38.4	30.7	46.1	3.85	7.70	EMIT
	mmol/l	2.78	2.22	3.34	0.280	0.560	
	mg/dl	35.4	28.3	42.5	3.55	7.10	Roche Cobas c303/501/502/503
	mmol/l	2.56	2.05	3.07	0.255	0.510	
SHBG	nmol/l	34.7	27.8	41.6	3.45	6.90	Abbott Alinity i

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
SHBG	nmol/l	37.4	29.9	44.9	3.75	7.50	Abbott Architect
	nmol/l	34.9	27.9	41.9	3.50	7.00	Beckman Access
	nmol/l	32.8	26.2	39.4	3.30	6.60	Beckman Dxl 600/800
	nmol/l	34.9	27.9	41.9	3.50	7.00	Beckman Dxl 9000
	nmol/l	33.2	26.6	39.8	3.30	6.60	Roche analysers
	nmol/l	31.6	25.3	37.9	3.15	6.30	Roche e402/e801
	nmol/l	32.7	26.2	39.2	3.25	6.50	Siemens Atellica IM
	nmol/l	31.9	25.5	38.3	3.20	6.40	Siemens/DPC Immulite 2000/2500
	nmol/l	32.0	25.6	38.4	3.20	6.40	Tosoh AIA-CL Series
Testosterone	ng/dl	764	611	917	76.5	153	Abbott Alinity i
	ng/ml	7.63	6.10	9.16	0.765	1.53	
	nmol/l	26.5	21.2	31.8	2.65	5.30	
	ng/dl	761	609	913	76.0	152	Abbott Architect
	ng/ml	7.60	6.08	9.12	0.760	1.52	
	nmol/l	26.4	21.1	31.7	2.65	5.30	
	ng/dl	741	593	889	74.0	148	Abbott Architect 2nd gen
	ng/ml	7.40	5.92	8.88	0.740	1.48	
	nmol/l	25.7	20.6	30.8	2.55	5.10	
	ng/dl	718	574	862	72.0	144	Beckman Access/LXi725
	ng/ml	7.17	5.74	8.60	0.715	1.43	
	nmol/l	24.9	19.9	29.9	2.50	5.00	
	ng/dl	666	533	799	66.5	133	Beckman Dxl 600/800
	ng/ml	6.65	5.32	7.98	0.665	1.33	
	nmol/l	23.1	18.5	27.7	2.30	4.60	
	ng/dl	718	574	862	72.0	144	Beckman Dxl 9000
	ng/ml	7.17	5.74	8.60	0.715	1.43	
	nmol/l	24.9	19.9	29.9	2.50	5.00	
	ng/dl	709	567	851	71.0	142	bioMerieux VIDAS Testosterone II
	ng/ml	7.08	5.66	8.50	0.710	1.42	
	nmol/l	24.6	19.7	29.5	2.45	4.90	
	ng/dl	378	302	454	38.0	76.0	DiaSorin Liaison XL
	ng/ml	3.77	3.02	4.52	0.375	0.750	
	nmol/l	13.1	10.5	15.7	1.30	2.60	
ng/dl	1049	839	1259	105	210	Finecare	
ng/ml	10.5	8.40	12.6	1.05	2.10		
nmol/l	36.4	29.1	43.7	3.65	7.30		
ng/dl	614	491	737	61.5	123	Immunotech RIA	
ng/ml	6.13	4.90	7.36	0.615	1.23		
nmol/l	21.3	17.0	25.6	2.15	4.30		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Testosterone	ng/dl	844	675	1013	84.5	169	J. Mitra CLIA - 181
	ng/ml	8.44	6.75	10.1	0.830	1.66	
	nmol/l	29.3	23.4	35.2	2.95	5.90	
	ng/dl	847	678	1016	84.5	169	J. Mitra CLIA - 2000
	ng/ml	8.47	6.78	10.2	0.865	1.73	
	nmol/l	29.4	23.5	35.3	2.95	5.90	
	ng/dl	827	662	992	82.5	165	Lifotronic eCL
	ng/ml	8.27	6.62	9.92	0.825	1.65	
	nmol/l	28.7	23.0	34.4	2.85	5.70	
	ng/dl	1124	899	1349	113	225	Ortho Vitros 3600/5600/ECi/XT 7600
	ng/ml	11.2	8.96	13.4	1.10	2.20	
	nmol/l	39.0	31.2	46.8	3.90	7.80	
	ng/dl	804	643	965	80.5	161	Roche Cobas 4000/e411 Test II
	ng/ml	8.04	6.43	9.65	0.805	1.61	
	nmol/l	27.9	22.3	33.5	2.80	5.60	
	ng/dl	818	654	982	82.0	164	Roche Cobas e402/e801 Test II
	ng/ml	8.18	6.54	9.82	0.820	1.64	
	nmol/l	28.4	22.7	34.1	2.85	5.70	
	ng/dl	830	664	996	83.0	166	Roche Cobas e601/ 602 Test II
	ng/ml	8.29	6.63	9.95	0.830	1.66	
	nmol/l	28.8	23.0	34.6	2.90	5.80	
	ng/dl	824	659	989	82.5	165	Roche Elecsys Test II
	ng/ml	8.24	6.59	9.89	0.825	1.65	
	nmol/l	28.6	22.9	34.3	2.85	5.70	
	ng/dl	617	494	740	61.5	123	Shenzhen YHLO iFlash Series
	ng/ml	6.16	4.93	7.39	0.615	1.23	
	nmol/l	21.4	17.1	25.7	2.15	4.30	
	ng/dl	654	523	785	65.5	131	Siemens Atellica IM
	ng/ml	6.54	5.23	7.85	0.655	1.31	
	nmol/l	22.7	18.2	27.2	2.25	4.50	
ng/dl	651	521	781	65.0	130	Siemens Centaur XP/XPT TSTII	
ng/ml	6.51	5.21	7.81	0.650	1.30		
nmol/l	22.6	18.1	27.1	2.25	4.50		
ng/dl	663	530	796	66.5	133	Siemens Centaur XP/XPT TSTO	
ng/ml	6.62	5.30	7.94	0.660	1.32		
nmol/l	23.0	18.4	27.6	2.30	4.60		
ng/dl	1135	908	1362	114	227	Siemens/DPC Immulite 2000/2500	
ng/ml	11.3	9.04	13.6	1.15	2.30		
nmol/l	39.4	31.5	47.3	3.95	7.90		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Testosterone	ng/dl	1167	934	1400	117	233	TOSOH AIA Series	
	ng/ml	11.7	9.36	14.0	1.15	2.30		
	nmol/l	40.5	32.4	48.6	4.05	8.10		
	Theophylline	ng/dl	1049	839	1259	105	210	Tosoh AIA-CL Series
		ng/ml	10.5	8.40	12.6	1.05	2.10	
		nmol/l	36.4	29.1	43.7	3.65	7.30	
µg/ml		25.4	20.3	30.5	2.55	5.10	Abbott Alinity Enzyme-immu	
µmol/l	141	113	169	14.0	28.0			
Thyroglobulin	µg/ml	24.0	19.2	28.8	2.40	4.80	Beckman AU Instruments	
	µmol/l	133	106	160	13.5	27.0		
	µg/ml	25.9	20.7	31.1	2.60	5.20	Roche Cobas 6000/8000	
	µmol/l	144	115	173	14.5	29.0		
Thyroglobulin	ng/ml	85.2	63.9	107	10.9	21.8	Abbott Alinity i	
	ng/ml	68.6	51.5	85.7	8.55	17.1	Beckman Access	
	ng/ml	68.4	51.3	85.5	8.55	17.1	Beckman Dxl 600/800	
	ng/ml	68.6	51.5	85.7	8.55	17.1	Beckman Dxl 9000	
	ng/ml	74.6	56.0	93.2	9.30	18.6	Beckman IRMA	
	ng/ml	66.0	49.5	82.5	8.25	16.5	DiaSorin Liaison XL	
	ng/ml	69.9	52.4	87.4	8.75	17.5	DiaSorin, Liaison XL TG II Gen	
	ng/ml	74.2	55.7	92.7	9.25	18.5	J. Mitra CLIA - 181	
	ng/ml	67.7	50.8	84.6	8.45	16.9	J. Mitra CLIA - 2000	
	ng/ml	27.8	20.9	34.7	3.45	6.90	Mindray CL 8/6/2/12/1000i Ref:Tg11X	
	ng/ml	67.7	50.8	84.6	8.45	16.9	Roche Cobas 4000/e411	
	ng/ml	65.1	48.8	81.4	8.15	16.3	Roche Cobas 4000/e411 Tg II	
	ng/ml	68.5	51.4	85.6	8.55	17.1	Roche Cobas e402/e801 Tg II	
	ng/ml	67.2	50.4	84.0	8.40	16.8	Roche Cobas e601/602	
	ng/ml	68.9	51.7	86.1	8.60	17.2	Roche Cobas e601/602 Tg II	
	ng/ml	72.2	54.2	90.2	9.00	18.0	Roche Elecsys	
	ng/ml	68.8	51.6	86.0	8.60	17.2	Roche Elecsys Tg II	
	ng/ml	44.4	33.3	55.5	5.55	11.1	Siemens/DPC Immulite 2000/2500	
	ng/ml	78.8	59.1	98.5	9.85	19.7	TOSOH AIA Series	
	ng/ml	66.3	49.7	82.9	8.30	16.6	Tosoh AIA-CL Series	
Thyroid Stimulating Hormone	µU/ml = mIU/l	15.9	12.7	19.1	1.60	3.20	Abbott Alinity i	
	µU/ml = mIU/l	16.3	13.0	19.6	1.65	3.30	Abbott Architect	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Thyroid Stimulating Hormone	µU/ml = mIU/l	19.0	15.2	22.8	1.90	3.80	Access/LXi725 Fast TSH 2nd gen.
	µU/ml = mIU/l	18.2	14.6	21.8	1.80	3.60	Access/LXi725 hyper TSH 3rd gen.
	µU/ml = mIU/l	17.8	14.2	21.4	1.80	3.60	Beckman Dxl 600/800 1st generation
	µU/ml = mIU/l	18.0	14.4	21.6	1.80	3.60	Beckman DXI 600/800 Fast TSH
	µU/ml = mIU/l	17.7	14.2	21.2	1.75	3.50	Beckman DXI 600/800 Hyper TSH
	µU/ml = mIU/l	17.6	14.1	21.1	1.75	3.50	Beckman DXI600/800/ Access 2 (3rd IS)
	µU/ml = mIU/l	13.8	11.0	16.6	1.40	2.80	Biomerieux VIDAS TSH
	µU/ml = mIU/l	13.3	10.6	16.0	1.35	2.70	Biomerieux VIDAS TSH3 Ultrasensitive
	µU/ml = mIU/l	30.1	24.1	36.1	3.00	6.00	DiaSorin Liaison
	µU/ml = mIU/l	33.0	26.4	39.6	3.30	6.60	DiaSorin Liaison XL
	µU/ml = mIU/l	15.6	12.5	18.7	1.55	3.10	Finecare
	µU/ml = mIU/l	20.2	16.2	24.2	2.00	4.00	Fujirebio Lumipulse G Series
µU/ml = mIU/l	15.6	12.5	18.7	1.55	3.10	Immunotech IRMA	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Thyroid Stimulating Hormone	µU/ml = mIU/l	22.6	18.1	27.1	2.25	4.50	Izotop IRMA
	µU/ml = mIU/l	22.4	17.9	26.9	2.25	4.50	J. Mitra CLIA - 181
	µU/ml = mIU/l	22.0	17.6	26.4	2.20	4.40	J. Mitra CLIA - 2000
	µU/ml = mIU/l	22.3	17.8	26.8	2.25	4.50	Lifotronic eCL
	µU/ml = mIU/l	23.2	18.6	27.8	2.30	4.60	Maccura I Series
	µU/ml = mIU/l	21.7	17.4	26.0	2.15	4.30	Mindray CL 8/6/2/12/1000i Ref: TSH 11X
	µU/ml = mIU/l	20.8	16.6	25.0	2.10	4.20	Mindray CL 900i Ref: TSH 11X
	µU/ml = mIU/l	22.5	18.0	27.0	2.25	4.50	Ortho Vitros TSH
	µU/ml = mIU/l	21.0	16.8	25.2	2.10	4.20	Ortho Vitros TSH3
	µU/ml = mIU/l	18.8	15.0	22.6	1.90	3.80	Roche Cobas 4000/e411
	µU/ml = mIU/l	17.5	14.0	21.0	1.75	3.50	Roche Cobas e402/e801
	µU/ml = mIU/l	19.0	15.2	22.8	1.90	3.80	Roche Cobas e601/ 602
	µU/ml = mIU/l	18.8	15.0	22.6	1.90	3.80	Roche Elecsys

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Thyroid Stimulating Hormone	µU/ml = mIU/l	23.0	18.4	27.6	2.30	4.60	Shenzhen YHLO iFlash Series
	µU/ml = mIU/l	18.7	15.0	22.4	1.85	3.70	Siemens Atellica IM
	µU/ml = mIU/l	18.9	15.1	22.7	1.90	3.80	Siemens Centaur
	µU/ml = mIU/l	19.9	15.9	23.9	2.00	4.00	Siemens Centaur TSH3-Ultra
	µU/ml = mIU/l	15.9	12.7	19.1	1.60	3.20	Siemens Dimension Exl LOCI
	µU/ml = mIU/l	19.5	15.6	23.4	1.95	3.90	Siemens/DPC Immulite 1000
	µU/ml = mIU/l	19.0	15.2	22.8	1.90	3.80	Siemens/DPC Immulite 2000/2500
	µU/ml = mIU/l	18.1	14.5	21.7	1.80	3.60	Sysmex HISCL Series
	µU/ml = mIU/l	21.6	17.3	25.9	2.15	4.30	TOSOH AIA Series
	µU/ml = mIU/l	18.9	15.1	22.7	1.90	3.80	Tosoh AIA-CL Series
Total Beta hCG	IU/ml	0.185	0.148	0.222	0.019	0.037	Abbott Alinity i
	mU/ml = IU/l	185	148	222	18.5	37.0	
	IU/ml	0.181	0.145	0.217	0.018	0.036	Abbott Architect
	mU/ml = IU/l	181	145	217	18.0	36.0	
	IU/ml	0.169	0.135	0.203	0.017	0.034	Beckman Access Total BhCG (5th IS)
	mU/ml = IU/l	169	135	203	17.0	34.0	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total Beta hCG	IU/ml	0.172	0.138	0.206	0.017	0.034	Beckman Access/LXi725
	mU/ml = IU/l	172	138	206	17.0	34.0	
	IU/ml	0.174	0.139	0.209	0.018	0.035	Beckman Dxl 600/800
	mU/ml = IU/l	174	139	209	17.5	35.0	
	IU/ml	0.172	0.138	0.206	0.017	0.034	Beckman Dxl 9000
	mU/ml = IU/l	172	138	206	17.0	34.0	
	IU/ml	0.176	0.141	0.211	0.018	0.035	Beckman DXI Total BhCG (5th IS)
	mU/ml = IU/l	176	141	211	17.5	35.0	
	IU/ml	0.392	0.314	0.470	0.039	0.078	bioMerieux, VIDAS
	mU/ml = IU/l	392	314	470	39.0	78.0	
	IU/ml	0.175	0.140	0.210	0.018	0.035	DiaSorin Liaison XL
	mU/ml = IU/l	175	140	210	17.5	35.0	
	IU/ml	0.245	0.196	0.294	0.025	0.049	J. Mitra CLIA - 181
	mU/ml = IU/l	245	196	294	24.5	49.0	
	IU/ml	0.251	0.201	0.301	0.025	0.050	J. Mitra CLIA - 2000
	mU/ml = IU/l	251	201	301	25.0	50.0	
	IU/ml	0.426	0.341	0.511	0.043	0.085	Lifotronic eCL
	mU/ml = IU/l	426	341	511	42.5	85.0	
	IU/ml	0.152	0.122	0.182	0.015	0.030	Mindray hCG CL 900i/920i/960i/980i
	mU/ml = IU/l	152	122	182	15.0	30.0	
IU/ml	0.409	0.327	0.491	0.041	0.082	Ortho Vitros 3600/5600/ECi/XT 7600	
mU/ml = IU/l	409	327	491	41.0	82.0		
IU/ml	0.175	0.140	0.210	0.018	0.035	Radiometer AQT90 Flex	
mU/ml = IU/l	175	140	210	17.5	35.0		
IU/ml	0.246	0.197	0.295	0.025	0.049	Roche Cobas Core EIA	
mU/ml = IU/l	246	197	295	24.5	49.0		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total Beta hCG	IU/ml	0.240	0.192	0.288	0.024	0.048	Roche hCG + Beta e402/e801
	mU/ml = IU/l	240	192	288	24.0	48.0	
	IU/ml	0.183	0.146	0.220	0.019	0.037	Roche hCG STAT(Intact)
	mU/ml = IU/l	183	146	220	18.5	37.0	
	IU/ml	0.247	0.198	0.296	0.025	0.049	Roche hCG+Beta
	mU/ml = IU/l	247	198	296	24.5	49.0	
	IU/ml	0.133	0.106	0.160	0.014	0.027	Shenzhen YHLO iFlash Series
	mU/ml = IU/l	133	106	160	13.5	27.0	
	IU/ml	0.137	0.110	0.164	0.014	0.027	Siemens Atellica IM
	mU/ml = IU/l	137	110	164	13.5	27.0	
	IU/ml	0.132	0.106	0.158	0.013	0.026	Siemens Centaur
	mU/ml = IU/l	132	106	158	13.0	26.0	
	IU/ml	0.458	0.366	0.550	0.046	0.092	Siemens Dimension
	mU/ml = IU/l	458	366	550	46.0	92.0	
	IU/ml	0.533	0.426	0.640	0.054	0.107	Siemens/DPC Immulite 1000
	mU/ml = IU/l	533	426	640	53.5	107	
	IU/ml	0.478	0.382	0.574	0.048	0.096	Siemens/DPC Immulite 2000
	mU/ml = IU/l	478	382	574	48.0	96.0	
IU/ml	0.411	0.329	0.493	0.041	0.082	TOSOH AIA Series	
mU/ml = IU/l	411	329	493	41.0	82.0		
IU/ml	0.546	0.437	0.655	0.055	0.109	Tosoh AIA-CL Series	
mU/ml = IU/l	546	437	655	54.5	109		
Total T3	ng/dl	334	251	417	41.5	83.0	Abbott Alinity i
	ng/ml	3.35	2.51	4.19	0.420	0.840	
	nmol/l	5.14	3.86	6.42	0.640	1.28	
	ng/dl	325	244	406	40.5	81.0	Abbott Architect
	ng/ml	3.25	2.44	4.06	0.405	0.810	
	nmol/l	5.00	3.75	6.25	0.625	1.25	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total T3	ng/dl	355	266	444	44.5	89.0	Beckman Access/LXi725
	ng/ml	3.55	2.66	4.44	0.445	0.890	
	nmol/l	5.46	4.10	6.82	0.680	1.36	
	ng/dl	348	261	435	43.5	87.0	Beckman Dxl 600/800
	ng/ml	3.49	2.62	4.36	0.435	0.870	
	nmol/l	5.36	4.02	6.70	0.670	1.34	
	ng/dl	355	266	444	44.5	89.0	Beckman Dxl 9000
	ng/ml	3.55	2.66	4.44	0.445	0.890	
	nmol/l	5.46	4.10	6.82	0.680	1.36	
	ng/dl	358	269	447	44.5	89.0	bioMerieux, VIDAS
	ng/ml	3.59	2.69	4.49	0.450	0.900	
	nmol/l	5.52	4.14	6.90	0.690	1.38	
	ng/dl	308	231	385	38.5	77.0	DiaSorin Liaison XL
	ng/ml	3.09	2.32	3.86	0.385	0.770	
	nmol/l	4.75	3.56	5.94	0.595	1.19	
	ng/dl	281	211	351	35.0	70.0	Immunotech RIA
	ng/ml	2.82	2.12	3.52	0.350	0.700	
	nmol/l	4.33	3.25	5.41	0.540	1.08	
	ng/dl	376	282	470	47.0	94.0	J. Mitra CLIA - 181
	ng/ml	3.77	2.83	4.71	0.470	0.940	
	nmol/l	5.79	4.34	7.24	0.725	1.45	
	ng/dl	377	283	471	47.0	94.0	J. Mitra CLIA - 2000
	ng/ml	3.78	2.84	4.72	0.470	0.940	
	nmol/l	5.81	4.36	7.26	0.725	1.45	
ng/dl	294	221	367	36.5	73.0	Mindray CL 8/6/2/12/1000i Ref: T3 11X	
ng/ml	2.94	2.21	3.67	0.365	0.730		
nmol/l	4.52	3.39	5.65	0.565	1.13		
ng/dl	290	218	362	36.0	72.0	Mindray CL 900i Ref: T3 11X	
ng/ml	2.91	2.18	3.64	0.365	0.730		
nmol/l	4.47	3.35	5.59	0.560	1.12		
ng/dl	433	325	541	54.0	108	Ortho Vitros 3600/5600/ECi/XT/7600	
ng/ml	4.34	3.26	5.42	0.540	1.08		
nmol/l	6.67	5.00	8.34	0.835	1.67		
ng/dl	410	308	512	51.0	102	Roche Cobas 4000/e411	
ng/ml	4.11	3.08	5.14	0.515	1.03		
nmol/l	6.31	4.73	7.89	0.790	1.58		
ng/dl	421	316	526	52.5	105	Roche Cobas e402/e801	
ng/ml	4.22	3.17	5.27	0.525	1.05		
nmol/l	6.48	4.86	8.10	0.810	1.62		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total T3	ng/dl	397	298	496	49.5	99.0	Roche Cobas e601/ 602
	ng/ml	3.98	2.99	4.97	0.495	0.990	
	nmol/l	6.11	4.58	7.64	0.765	1.53	
	ng/dl	319	239	399	40.0	80.0	Shenzhen YHLO iFlash Series
	ng/ml	3.20	2.40	4.00	0.400	0.800	
	nmol/l	4.91	3.68	6.14	0.615	1.23	
	ng/dl	407	305	509	51.0	102	Siemens Atellica IM
	ng/ml	4.08	3.06	5.10	0.510	1.02	
	nmol/l	6.27	4.70	7.84	0.785	1.57	
	ng/dl	395	296	494	49.5	99.0	Siemens Centaur
	ng/ml	3.96	2.97	4.95	0.495	0.990	
	nmol/l	6.09	4.57	7.61	0.760	1.52	
	ng/dl	359	269	449	45.0	90.0	Siemens/DPC Immulite 2000/2500
	ng/ml	3.60	2.70	4.50	0.450	0.900	
	nmol/l	5.53	4.15	6.91	0.690	1.38	
	ng/dl	355	266	444	44.5	89.0	TOSOH AIA Series
	ng/ml	3.55	2.66	4.44	0.445	0.890	
	nmol/l	5.46	4.10	6.82	0.680	1.36	
ng/dl	348	261	435	43.5	87.0	Tosoh AIA-CL Series	
ng/ml	3.49	2.62	4.36	0.435	0.870		
nmol/l	5.36	4.02	6.70	0.670	1.34		
Total T4	ng/ml	137	103	171	17.0	34.0	Abbott Alinity i
	nmol/l	176	132	220	22.0	44.0	
	µg/dl	13.7	10.3	17.1	1.70	3.40	
	ng/ml	140	105	175	17.5	35.0	Abbott Architect
	nmol/l	179	134	224	22.5	45.0	
	µg/dl	14.0	10.5	17.5	1.75	3.50	
	ng/ml	166	125	207	20.5	41.0	Beckman Access/LXi725
	nmol/l	213	160	266	26.5	53.0	
	µg/dl	16.6	12.5	20.7	2.05	4.10	
	ng/ml	161	121	201	20.0	40.0	Beckman Dxl 600/800
	nmol/l	206	155	257	25.5	51.0	
	µg/dl	16.1	12.1	20.1	2.00	4.00	
	ng/ml	166	125	207	20.5	41.0	Beckman Dxl 9000
	nmol/l	213	160	266	26.5	53.0	
	µg/dl	16.6	12.5	20.7	2.05	4.10	
	ng/ml	165	124	206	20.5	41.0	bioMerieux, VIDAS
	nmol/l	212	159	265	26.5	53.0	
	µg/dl	16.5	12.4	20.6	2.05	4.10	

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total T4	ng/ml	133	99.8	166	16.5	33.0	DiaSorin Liaison XL
	nmol/l	171	128	214	21.5	43.0	
	µg/dl	13.3	9.98	16.6	1.65	3.30	
	ng/ml	108	81.0	135	13.5	27.0	Immunotech RIA
	nmol/l	139	104	174	17.5	35.0	
	µg/dl	10.8	8.10	13.5	1.35	2.70	
	ng/ml	140	105	175	17.5	35.0	J. Mitra CLIA - 181
	nmol/l	180	135	225	22.5	45.0	
	µg/dl	14.0	10.5	17.5	1.75	3.50	
	ng/ml	141	106	176	17.5	35.0	J. Mitra CLIA - 2000
	nmol/l	181	136	226	22.5	45.0	
	µg/dl	14.1	10.6	17.6	1.75	3.50	
	ng/ml	147	110	184	18.5	37.0	Mindray CL 8/6/2/12/1000i Ref: T4 11X
	nmol/l	189	142	236	23.5	47.0	
	µg/dl	14.7	11.0	18.4	1.85	3.70	
	ng/ml	147	110	184	18.5	37.0	Ortho Vitros 3600/5600/ECi/XT 7600
	nmol/l	188	141	235	23.5	47.0	
	µg/dl	14.7	11.0	18.4	1.85	3.70	
	ng/ml	136	102	170	17.0	34.0	Roche Cobas 4000/e411
	nmol/l	175	131	219	22.0	44.0	
	µg/dl	13.7	10.3	17.1	1.70	3.40	
	ng/ml	125	93.8	156	15.5	31.0	Roche Cobas e402/e801
	nmol/l	160	120	200	20.0	40.0	
	µg/dl	12.5	9.38	15.6	1.55	3.10	
ng/ml	131	98.3	164	16.5	33.0	Roche Cobas e601/ 602	
nmol/l	168	126	210	21.0	42.0		
µg/dl	13.1	9.83	16.4	1.65	3.30		
ng/ml	132	99.0	165	16.5	33.0	Roche Elecsys	
nmol/l	169	127	211	21.0	42.0		
µg/dl	13.2	9.90	16.5	1.65	3.30		
ng/ml	115	86.3	144	14.5	29.0	Shenzhen YHLO iFlash Series	
nmol/l	148	111	185	18.5	37.0		
µg/dl	11.5	8.63	14.4	1.45	2.90		
ng/ml	155	116	194	19.5	39.0	Siemens Atellica IM	
nmol/l	199	149	249	25.0	50.0		
µg/dl	15.5	11.6	19.4	1.95	3.90		
ng/ml	160	120	200	20.0	40.0	Siemens Centaur	
nmol/l	205	154	256	25.5	51.0		
µg/dl	16.0	12.0	20.0	2.00	4.00		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Total T4	ng/ml	147	110	184	18.5	37.0	Siemens/DPC Immulite 2000/2500	
	nmol/l	188	141	235	23.5	47.0		
	µg/dl	14.7	11.0	18.4	1.85	3.70		
	ng/ml	129	96.8	161	16.0	32.0	TOSOH AIA Series	
		nmol/l	166	125	207	20.5		41.0
		µg/dl	12.9	9.68	16.1	1.60		3.20
	ng/ml	159	119	199	20.0	40.0	Tosoh AIA-CL Series	
		nmol/l	204	153	255	25.5		51.0
		µg/dl	15.9	11.9	19.9	2.00		4.00
	Valproic Acid	µg/ml	133	106	160	13.5	27.0	Abbott Alinity (CMIA)
		µmol/l	921	737	1105	92.0	184	
		µg/ml	133	106	160	13.5	27.0	Abbott Alinity (PETINA)
µmol/l		921	737	1105	92.0	184		
µg/ml		141	113	169	14.0	28.0	Abbott Architect (CMIA)	
µmol/l		979	783	1175	98.0	196		
µg/ml		130	104	156	13.0	26.0	Abbott Architect (PETINIA)	
µmol/l		901	721	1081	90.0	180		
µg/ml		155	124	186	15.5	31.0	Beckman AU Instruments	
µmol/l		1076	861	1291	108	215		
µg/ml		152	122	182	15.0	30.0	EMIT	
µmol/l		1051	841	1261	105	210		
µg/ml		149	119	179	15.0	30.0	Ortho Vitros 4600/5600/5.1/XT 7600	
µmol/l		1032	826	1238	103	206		
µg/ml		142	114	170	14.0	28.0	Roche Cobas 4000/c311	
µmol/l		986	789	1183	98.5	197		
µg/ml		135	108	162	13.5	27.0	Roche Cobas 6000/8000	
µmol/l		935	748	1122	93.5	187		
µg/ml		137	110	164	13.5	27.0	Siemens Atellica CH	
µmol/l		948	758	1138	95.0	190		
µg/ml		124	99.2	149	12.5	25.0	Siemens Dimension	
µmol/l		859	687	1031	86.0	172		
µg/ml		154	123	185	15.5	31.0	Siemens/DPC Immulite 2000/2500	
µmol/l		1068	854	1282	107	214		
Vancomycin	µg/ml	15.9	12.7	19.1	1.60	3.20	Abbott Alinity (CMIA)	
	µmol/l	10.7	8.56	12.8	1.05	2.10		
	µg/ml	15.5	12.4	18.6	1.55	3.10	Abbott Alinity (PETINA)	
	µmol/l	10.4	8.32	12.5	1.05	2.10		
	µg/ml	15.6	12.5	18.7	1.55	3.10	Abbott Architect (CMIA)	
	µmol/l	10.5	8.40	12.6	1.05	2.10		

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)						
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28								
Size: 12 x 5 ml / 4 x 5 ml		Range						
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Vancomycin	µg/ml	12.7	10.2	15.2	1.25	2.50	Beckman Coulter Synchron LX / Unicel	
	µmol/l	8.52	6.82	10.2	0.840	1.68		
	µg/ml	12.8	10.2	15.4	1.30	2.60	EMIT	
	µmol/l	8.64	6.91	10.4	0.880	1.76		
	µg/ml	13.2	10.6	15.8	1.30	2.60	Ortho Vitros Microslide Systems	
	µmol/l	8.89	7.11	10.7	0.905	1.81		
	µg/ml	14.0	11.2	16.8	1.40	2.80	Roche Cobas 6000/8000	
	µmol/l	9.41	7.53	11.3	0.945	1.89		
	µg/ml	14.3	11.4	17.2	1.45	2.90	Siemens Atellica CH	
	µmol/l	9.63	7.70	11.6	0.985	1.97		
	Vitamin B12	pg/ml	598	478	718	60.0	120	Abbott Alinity i
		pmol/l	441	353	529	44.0	88.0	
pg/ml		659	527	791	66.0	132	Abbott Architect	
pmol/l		486	389	583	48.5	97.0		
pg/ml		644	515	773	64.5	129	Beckman Access/LXi725	
pmol/l		475	380	570	47.5	95.0		
pg/ml		654	523	785	65.5	131	Beckman Dxl 600/800	
pmol/l		483	386	580	48.5	97.0		
pg/ml		644	515	773	64.5	129	Beckman Dxl 9000	
pmol/l		475	380	570	47.5	95.0		
pg/ml		706	565	847	70.5	141	DiaSorin Liaison XL	
pmol/l		521	417	625	52.0	104		
pg/ml		949	759	1139	95.0	190	J. Mitra CLIA - 181	
pmol/l		700	560	840	70.0	140		
pg/ml		959	767	1151	96.0	192	J. Mitra CLIA - 2000	
pmol/l		708	566	850	71.0	142		
pg/ml		1083	866	1300	109	217	Lifotronic eCL	
pmol/l		799	639	959	80.0	160		
pg/ml		879	703	1055	88.0	176	Mindray CL 900i/920i/960i/980i	
pmol/l		649	519	779	65.0	130		
pg/ml		873	698	1048	87.5	175	Mindray CL series (Excl. CL 900 series)	
pmol/l		644	515	773	64.5	129		
pg/ml		738	590	886	74.0	148	Ortho Vitros 3600/5600/ECi/XT 7600	
pmol/l		545	436	654	54.5	109		
pg/ml	831	665	997	83.0	166	Roche Cobas 4000/e411 Gen II		
pmol/l	613	490	736	61.5	123			
pg/ml	776	621	931	77.5	155	Roche Cobas e402/e801 Gen II		
pmol/l	573	458	688	57.5	115			

Method		Immunoassay Premium Plus - Level 3 (IA PREMIUM PLUS 3)					
Lot. No: 2545EC Cat. No: IA3111 Expiry: 2028/07/28							
Size: 12 x 5 ml / 4 x 5 ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Vitamin B12	pg/ml	824	659	989	82.5	165	Roche Cobas e601/ 602 Gen II
	pmol/l	608	486	730	61.0	122	
	pg/ml	833	666	1000	83.5	167	Roche Elecsys
	pmol/l	615	492	738	61.5	123	
	pg/ml	859	687	1031	86.0	172	Shenzhen YHLO iFlash Series
	pmol/l	634	507	761	63.5	127	
	pg/ml	925	740	1110	92.5	185	Siemens Atellica IM lot <=13290
	pmol/l	683	546	820	68.5	137	
	pg/ml	950	760	1140	95.0	190	Siemens Centaur
	pmol/l	701	561	841	70.0	140	
	pg/ml	715	572	858	71.5	143	Siemens Dimension
	pmol/l	528	422	634	53.0	106	
	pg/ml	813	650	976	81.5	163	Siemens/DPC Immulite 2000
	pmol/l	600	480	720	60.0	120	
	pg/ml	1037	830	1244	104	207	TOSOH AIA Series
	pmol/l	765	612	918	76.5	153	
	pg/ml	776	621	931	77.5	155	Tosoh AIA-CL Series
	pmol/l	573	458	688	57.5	115	