

PRODUCT INFORMATION

HN1530 / HS2611

1687UN

Please note that for Human Assayed Multi-Sera Level 2, lot 1687UN,
Alkaline Phosphatase is stable for 6 days at +2°C to +8°C.

Alkaline Phosphatase is also stable for 8 hours at +15°C to +25°C and
28 days when frozen once at -18°C to -24°C.

It is still recommended that serum is allowed to stand for 1 hour at +15°C to +25°C before
measurement of Alkaline Phosphatase.

CCS INC675

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

CAT. NO. HNI530	GTIN: 05055273203783	SIZE: 20 x 5ml
CAT. NO. HS2611	GTIN: 05055273203813	SIZE: 5 x 5ml
LOT NO. 1687UN	EXPIRY: 2027-10-28	

INTENDED USE

This product is intended for *in vitro* diagnostic use, in the quality control of diagnostic assays. The Human Assayed Multi-sera is for the control of accuracy.

DEVICE DESCRIPTION

The Human Assayed Multi-sera is supplied at 2 levels, level 2 and 3. Target values and ranges are supplied for the analytes listed in the values section at both levels.

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.

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 8 hours at +15°C to +25°C or 7 days at +2°C to +8°C, and 28 days when frozen once at -18°C to -24°C. (See Limitations)

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

LIMITATIONS

For Total & Prostatic Acid Phosphatase, the material should be stabilised by adding 1 drop (25µl - 30µl) of 0.7M Acetic acid solution to 1ml of the serum exactly 30 minutes after reconstitution. After stabilisation Total and Prostatic Acid Phosphatase is stable for 2 hours at +15°C to +25°C, 2 days at +2°C to +8°C, and 28 days when frozen once at -18°C to -24°C.

Alkaline Phosphatase levels in the reconstituted serum will rise over the stability period. It is recommended that the reconstituted serum is allowed to stand for 1 hour at +15°C to +25°C before measurement. Alkaline Phosphatase is stable for 6 days at +2°C to +8°C, 8 hours at +15°C to +25°C and 28 days when frozen once at -18°C to -24°C.

Bilirubin in the serum is light sensitive and it is recommended that the serum is stored in the dark. Stored in the dark, it is stable for 4 days at +2°C to +8°C. Do not store at +15°C to +25°C. Do not freeze.

GLDH is stable for 2 days at +2°C to +8°C.

NEFA is stable for 1 day at +2°C to +8°C.

Total PSA is stable for 4 days at +2°C to +8°C, or 28 days in aliquots frozen at -18°C to -24°C.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components.

Different lot numbers of this control should not be interchanged, as the values assigned to the controls vary from lot to lot.

The control should not be used as a calibration material.

Due to the zinc content in some batches of rubber stoppers, the QC and calibrator material should be aliquoted into polypropylene tubes and stored at +2°C to +8°C to ensure stable zinc levels throughout the stability period.

PREPARATION FOR USE

The Human Assayed Multi-sera is supplied lyophilised.

- Carefully reconstitute each vial of lyophilised serum with exactly 5ml 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

Human Assayed Multi-sera - Level 2 20 x 5ml / 5 x 5ml

MATERIALS REQUIRED BUT NOT PROVIDED

Volumetric pipette

ASSIGNED VALUES

Due to the variation caused by test equipment, test reagents and laboratory technique, the quoted ranges are provided for guidance. It is recommended that these ranges are used until each laboratory has established its own ranges, based on individual laboratory requirements.

Each batch of assayed human serum is submitted to reference laboratories for assignment against international Reference Standards. Where international Reference Standards are unavailable, Reference Methods are used. Values are also collected from approx. 3000 laboratories worldwide and using a unique statistical analysis, a value is assigned.

With each batch, a control range is provided for individual parameters and each parameter method. The control range is equivalent to the assigned mean $\pm 2S.D.$

If an instrument specific value is not available, refer to the Method section. If necessary, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.

NOTES

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- (1) Applies only in Germany. Ranges established according to the Guidelines of the Federal Chamber of Physicians in Germany.
- (2) Values established by reference laboratories officially recognised by the Federal Chamber of Physicians in Germany.
- (3) DGKC: German Society for Clinical Chemistry.
- (4) IFCC: International Federation of Clinical Chemistry.
- (5) SCE: Scandinavian Committee on Enzymes.

EC	REP
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Abbott Alinity c			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.0	34.9	47.1	3.05	6.10	Abbott Alinity Albumin BCG 2
	g/dl	4.10	3.49	4.71	0.305	0.610	
	g/l	39.0	33.2	44.8	2.90	5.80	Abbott Alinity Albumin BCP 2
	g/dl	3.90	3.32	4.48	0.290	0.580	
	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.305	0.610	
	g/l	39.7	33.7	45.7	3.00	6.00	Bromocresol Purple
	g/dl	3.97	3.37	4.57	0.300	0.600	
Alkaline Phosphatase	U/l	185	157	213	14.0	28.0	Abbott Alinity Alkaline Phosphatase 2
	U/l	179	152	206	13.5	27.0	AMP non-optimised
	U/l	184	156	212	14.0	28.0	AMP optimised to IFCC
	U/l	172	146	198	13.0	26.0	Colorimetric
ALT (GPT)	U/l	38	30	46	4.00	8.00	Abbott Alinity ALT 2
	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	54	46	62	4.00	8.00	Immunoinhibition, EPS substrate
Amylase, Total	U/l	80	68	92	6.00	12.0	Abbott Alinity Amylase 2
	U/l	80	68	92	6.00	12.0	Abbott Architect/Alinity cal factor 3431
	U/l	83	71	95	6.00	12.0	Abbott Architect/Alinity cal factor 3806
	U/l	81	69	93	6.00	12.0	Abbott blocked pNPG7
AST (GOT)	U/l	40	32	48	4.00	8.00	Abbott Alinity AST 2
	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Bicarbonate	mmol/l	14.0	11.1	16.9	1.45	2.90	Enzymatic
Bile Acids	µmol/l	23.9	19.1	28.7	2.40	4.80	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.13	0.893	1.37	0.120	0.240	Diazo with Dichloroaniline
	µmol/l	19.4	15.3	23.5	2.05	4.10	
	mg/dl	1.13	0.893	1.37	0.120	0.240	Diazo with Sulphanilic Acid
	µmol/l	19.3	15.2	23.4	2.05	4.10	
	mg/dl	1.14	0.901	1.38	0.120	0.240	Dichlorophenyl Diazonium
	µmol/l	19.5	15.4	23.6	2.05	4.10	
Bilirubin, Total	mg/dl	1.66	1.31	2.01	0.175	0.350	Abbott Alinity Total Bilirubin 2
	µmol/l	28.3	22.4	34.2	2.95	5.90	
	mg/dl	1.65	1.30	2.00	0.175	0.350	Diazo with Dichloroaniline
	µmol/l	28.2	22.3	34.1	2.95	5.90	
	mg/dl	1.60	1.26	1.94	0.170	0.340	Diazo with Sulphanilic Acid
	µmol/l	27.3	21.6	33.0	2.85	5.70	
	mg/dl	1.67	1.32	2.02	0.175	0.350	Diazonium ion
	µmol/l	28.6	22.6	34.6	3.00	6.00	
	mg/dl	1.66	1.31	2.01	0.175	0.350	Dichlorophenyl Diazonium
	µmol/l	28.3	22.4	34.2	2.95	5.90	

Abbott Alinity c			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	95.9	88.2	104	4.05	8.10	ISE, indirect
Cholesterol	mmol/l	4.22	3.67	4.77	0.275	0.550	Abbott Alinity Cholesterol 2
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.17	3.63	4.71	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	161	140	182	10.5	21.0	
Cholinesterase	U/l	7149	5719	8579	715	1430	Colorimetric - Butyrylthiocholine
CK, Total	U/l	225	185	265	20.0	40.0	Abbott CK-NAC (IFCC)
	U/l	225	185	265	20.0	40.0	CK-NAC (IFCC)
	U/l	226	185	267	20.5	41.0	CK-NAC substrate start (DGKC)
Copper	µmol/l	14.3	11.4	17.2	1.45	2.90	Colorimetric
	µg/dl	90.9	72.7	109	9.05	18.1	
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Abbott Alinity Creatinine 2
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Enzymatic UV method
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	IDMS traceable
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.55	1.24	1.86	0.155	0.310	Jaffe rate blanked
	µmol/l	137	110	164	13.5	27.0	
D-3-Hydroxybutyrate	mmol/l	0.295	0.251	0.339	0.022	0.044	Tris buffer 100mmol pH 8.5
Free T4	pmol/l	15.8	11.9	19.7	1.95	3.90	Abbott Architect/Alinity
	pg/ml	12.3	9.23	15.4	1.55	3.10	
	ng/dl	1.23	0.923	1.54	0.155	0.310	
gamma-GT	U/l	54	46	62	4.00	8.00	Abbott Alinity GGT 2
	U/l	53	45	61	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	5.85	4.97	6.73	0.440	0.880	Glucose oxidase
	mg/dl	105	89.3	121	8.00	16.0	
	mmol/l	5.92	5.03	6.81	0.445	0.890	Hexokinase
	mg/dl	107	91.0	123	8.00	16.0	
HDL-Cholesterol	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, Clearance method
	mg/dl	54.0	45.9	62.1	4.05	8.10	
	mmol/l	1.43	1.22	1.64	0.105	0.210	Direct HDL, Immunoseparation
	mg/dl	55.2	46.9	63.5	4.15	8.30	

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Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, PPD
	mg/dl	54.0	45.9	62.1	4.05	8.10	
	mmol/l	1.41	1.20	1.62	0.105	0.210	HDL Ultra/Accel Selective Detergent
	mg/dl	54.4	46.2	62.6	4.10	8.20	
Iron	µmol/l	19.8	16.2	23.4	1.80	3.60	Abbott Alinity Iron 2
	µg/dl	111	91.0	131	10.0	20.0	
	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric with ppt.
	µg/dl	112	91.8	132	10.0	20.0	
	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	µg/dl	112	91.8	132	10.0	20.0	
Lactate	mmol/l	1.56	1.28	1.84	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	14.1	11.6	16.6	1.25	2.50	
LD (LDH)	U/l	191	162	220	14.5	29.0	Abbott Alinity LD 2
	U/l	191	162	220	14.5	29.0	L to P IFCC
	U/l	191	162	220	14.5	29.0	Lactate to Pyruvate methods
Lithium	mmol/l	0.993	0.874	1.11	0.059	0.117	Spectrophotometric
	mg/dl	0.690	0.607	0.773	0.042	0.083	
Magnesium	mmol/l	0.897	0.789	1.01	0.057	0.113	Arsenazo III
	mg/dl	2.18	1.92	2.44	0.130	0.260	
	mmol/l	0.897	0.789	1.01	0.057	0.113	Chlorphosphonazo III
	mg/dl	2.18	1.92	2.44	0.130	0.260	
	mmol/l	0.913	0.803	1.02	0.054	0.107	Enzymatic
	mg/dl	2.22	1.95	2.49	0.135	0.270	
Osmolality	mOsm/kg	297	238	356	29.5	59.0	Calculated
Phosphate, Inorganic	mmol/l	1.41	1.20	1.62	0.105	0.210	Phosphomolybdate enzymatic
	mg/dl	4.37	3.71	5.03	0.330	0.660	
	mmol/l	1.40	1.19	1.61	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.34	3.69	4.99	0.325	0.650	
Potassium	mmol/l	3.95	3.63	4.27	0.160	0.320	ISE method - indirect
Protein, Total	g/l	59.6	47.7	71.5	5.95	11.9	Abbott Alinity Total Protein 2
	g/dl	5.96	4.77	7.15	0.595	1.19	
	g/l	59.6	47.7	71.5	5.95	11.9	Biuret reaction, end point
	g/dl	5.96	4.77	7.15	0.595	1.19	
PSA, Total	ng/ml	7.93	5.95	9.91	0.990	1.98	Abbott Architect/ Alinity
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone (TSH)	µU/ml	1.11	0.888	1.33	0.110	0.220	Abbott Architect/ Alinity

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Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
TIBC	μmol/l	41.7	32.9	50.5	4.40	8.80	Calculated from Transferrin
	μg/dl	233	184	282	24.5	49.0	
	μmol/l	40.6	32.1	49.1	4.25	8.50	FE+UIBC(saturation with iron)
	μg/dl	227	179	275	24.0	48.0	
Triglycerides	mmol/l	0.987	0.829	1.15	0.082	0.163	Lipase/GK UV. no correction
	mg/dl	87.3	73.3	101	6.85	13.7	
	mmol/l	0.980	0.823	1.14	0.080	0.160	Lipase/Glycerol Dehydrogenase
	mg/dl	86.7	72.8	101	7.15	14.3	
	mmol/l	0.987	0.829	1.15	0.082	0.163	Lipase/GPO-PAP no correction
	mg/dl	87.3	73.3	101	6.85	13.7	
Urea	mmol/l	6.98	5.93	8.03	0.525	1.05	Urease, end point
	mg/dl	41.9	35.6	48.2	3.15	6.30	
	mg/dl (BUN)	19.6	16.7	22.5	1.45	2.90	
	mmol/l	6.83	5.81	7.85	0.510	1.02	Urease, kinetic
	mg/dl	41.0	34.9	47.1	3.05	6.10	
	mg/dl (BUN)	19.1	16.2	22.0	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.330	0.287	0.373	0.022	0.043	Abbott Alinity Uric Acid 2
	mg/dl	5.54	4.82	6.26	0.360	0.720	
	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.61	4.88	6.34	0.365	0.730	
	mmol/l	0.332	0.289	0.375	0.022	0.043	Uricase Perox. with ascorb. ox
	mg/dl	5.58	4.85	6.31	0.365	0.730	
Zinc	μmol/l	24.5	19.6	29.4	2.45	4.90	Colorimetric with deprot.
	μg/dl	160	128	192	16.0	32.0	
	μmol/l	24.1	19.3	28.9	2.40	4.80	Colorimetric without deprot.
	μg/dl	157	126	188	15.5	31.0	

Abbott Alinity i			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	16.2	12.2	20.2	2.00	4.00	Abbott Architect/Alinity
	pg/ml	12.6	9.45	15.8	1.60	3.20	
	ng/dl	1.26	0.945	1.58	0.160	0.320	
PSA, Total	ng/ml	7.89	5.92	9.86	0.985	1.97	Abbott Architect/ Alinity
Thyroid Stimulating Hormone (TSH)	μU/ml	1.15	0.920	1.38	0.115	0.230	Abbott Architect/ Alinity
Total T3	nmol/l	1.92	1.44	2.40	0.240	0.480	Abbott Architect/ Alinity
	ng/ml	1.25	0.938	1.56	0.155	0.310	
	ng/dl	125	93.8	156	15.5	31.0	
Total T4	nmol/l	86.7	65.0	108	10.7	21.3	Abbott Architect/ Alinity
	ng/ml	67.6	50.7	84.5	8.45	16.9	
	μg/dl	6.76	5.07	8.45	0.845	1.69	

Abbott Arch c - Non Abbott reagent			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.7	33.7	45.7	3.00	6.00	Bromocresol Green
	g/dl	3.97	3.37	4.57	0.300	0.600	
Alkaline Phosphatase	U/l	187	159	215	14.0	28.0	AMP optimised to IFCC
ALT (GPT)	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Cholesterol	mmol/l	4.16	3.62	4.70	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Cholinesterase	U/l	6075	4860	7290	608	1215	Colorimetric - Butyrylthiocholine
CK, Total	U/l	222	182	262	20.0	40.0	CK-NAC (IFCC)
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	5.97	5.07	6.87	0.450	0.900	Hexokinase
	mg/dl	108	91.8	124	8.00	16.0	
Magnesium	mmol/l	0.890	0.783	0.997	0.054	0.107	Xylidyl Blue
	mg/dl	2.16	1.90	2.42	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.41	1.20	1.62	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.37	3.71	5.03	0.330	0.660	
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
Urea	mmol/l	6.90	5.87	7.93	0.515	1.03	Urease, kinetic
	mg/dl	41.5	35.3	47.7	3.10	6.20	
	mg/dl (BUN)	19.3	16.4	22.2	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.325	0.283	0.367	0.021	0.042	Uricase perox. no ascorb. ox.
	mg/dl	5.46	4.75	6.17	0.355	0.710	

Abbott Architect c systems			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.1	34.9	47.3	3.10	6.20	Abbott Architect Albumin BCG 2
	g/dl	4.11	3.49	4.73	0.310	0.620	
	g/l	39.4	33.5	45.3	2.95	5.90	Abbott Architect Albumin BCP 2
	g/dl	3.94	3.35	4.53	0.295	0.590	
	g/l	40.7	34.6	46.8	3.05	6.10	Bromocresol Green
	g/dl	4.07	3.46	4.68	0.305	0.610	
	g/l	40.5	34.4	46.6	3.05	6.10	Bromocresol Purple
g/dl	4.05	3.44	4.66	0.305	0.610		
Alkaline Phosphatase	U/l	186	158	214	14.0	28.0	Abbott Architect Alkaline Phosphatase 2
	U/l	180	153	207	13.5	27.0	AMP non-optimised
	U/l	182	155	209	13.5	27.0	AMP optimised to IFCC
	U/l	175	149	201	13.0	26.0	Colorimetric
ALT (GPT)	U/l	39	31	47	4.00	8.00	Abbott Architect ALT 2
	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	55	47	63	4.00	8.00	Immunoinhibition, EPS substrate
Amylase, Total	U/l	81	69	93	6.00	12.0	Abbott Architect Amylase 2
	U/l	81	69	93	6.00	12.0	Abbott Architect/Alinity cal factor 3431
	U/l	83	71	95	6.00	12.0	Abbott Architect/Alinity cal factor 3806
	U/l	82	70	94	6.00	12.0	Abbott blocked pNPG7
AST (GOT)	U/l	40	32	48	4.00	8.00	Abbott Architect AST 2
	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	12.9	10.2	15.6	1.35	2.70	Enzymatic
	mmol/l	12.8	10.2	15.4	1.30	2.60	PEP Carboxylase
Bile Acids	µmol/l	26.0	20.8	31.2	2.60	5.20	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.14	0.901	1.38	0.120	0.240	Diazo with Dichloroaniline
	µmol/l	19.5	15.4	23.6	2.05	4.10	
	mg/dl	1.13	0.893	1.37	0.120	0.240	Diazo with Sulphanilic Acid
	µmol/l	19.3	15.2	23.4	2.05	4.10	
	mg/dl	1.15	0.909	1.39	0.120	0.240	Dichlorophenyl Diazonium
	µmol/l	19.6	15.5	23.7	2.05	4.10	
Bilirubin, Total	mg/dl	1.70	1.34	2.06	0.180	0.360	Abbott Alin/Arch cal batch no > 97447/8/9
	µmol/l	29.1	23.0	35.2	3.05	6.10	
Chloride	mmol/l	95.1	87.5	103	3.95	7.90	ISE, indirect
Cholesterol	mmol/l	4.28	3.72	4.84	0.280	0.560	Abbott Architect Cholesterol 2
	mg/dl	165	144	186	10.5	21.0	
	mmol/l	4.26	3.71	4.81	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.31	3.75	4.87	0.280	0.560	Cholesterol Oxidase - IDMS
mg/dl	166	144	188	11.0	22.0		

Abbott Architect c systems			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Cholinesterase	U/l	7095	5676	8514	710	1419	Colorimetric - Butyrylthiocholine	
CK, Total	U/l	218	179	257	19.5	39.0	Abbott CK-NAC (IFCC)	
	U/l	215	176	254	19.5	39.0	CK-NAC (IFCC)	
	U/l	213	175	251	19.0	38.0	CK-NAC serum start (DGKC)	
	U/l	223	183	263	20.0	40.0	CK-NAC substrate start (DGKC)	
Copper	µmol/l	13.5	10.8	16.2	1.35	2.70	Colorimetric	
	µg/dl	85.9	68.7	103	8.55	17.1		
Creatinine	mg/dl	1.51	1.21	1.81	0.150	0.300	Abbott Architect Creatinine 2	
	µmol/l	134	107	161	13.5	27.0		
	mg/dl	1.50	1.20	1.80	0.150	0.300	Alkaline picrate no deproteinisation	
	µmol/l	133	106	160	13.5	27.0		
	mg/dl	1.54	1.23	1.85	0.155	0.310	Alkaline picrate with deproteinisation	
	µmol/l	136	109	163	13.5	27.0		
	mg/dl	1.48	1.18	1.78	0.150	0.300	Enzymatic UV method	
	µmol/l	131	105	157	13.0	26.0		
	mg/dl	1.55	1.24	1.86	0.155	0.310	Jaffe rate blanked	
	µmol/l	137	110	164	13.5	27.0		
	U/l	55	47	63	4.00	8.00	Abbott Architect GGT 2	
	U/l	51	43	59	4.00	8.00	DCL, gamma glut.-3-carb.-4-nitro.	
	U/l	53	45	61	4.00	8.00	Gamma glut.-3-carb.-4-nitro.	
	U/l	55	47	63	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)	
	Glucose	mmol/l	5.99	5.09	6.89	0.450	0.900	Glucose oxidase
		mg/dl	108	91.8	124	8.00	16.0	
mmol/l		5.92	5.03	6.81	0.445	0.890	Hexokinase	
mg/dl		107	91.0	123	8.00	16.0		
HDL-Cholesterol	mmol/l	1.39	1.18	1.60	0.105	0.210	Direct HDL, Clearance method	
	mg/dl	53.7	45.6	61.8	4.05	8.10		
	mmol/l	1.51	1.28	1.74	0.115	0.230	Direct HDL, Immunoseparation	
	mg/dl	58.3	49.6	67.0	4.35	8.70		
	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, PPD	
	mg/dl	54.0	45.9	62.1	4.05	8.10		
	mmol/l	1.39	1.18	1.60	0.105	0.210	HDL Ultra/Accel Selective Detergent	
	mg/dl	53.7	45.6	61.8	4.05	8.10		
Iron	µmol/l	20.1	16.5	23.7	1.80	3.60	Abbott Architect Chemilum	
	µg/dl	112	91.8	132	10.0	20.0		
	µmol/l	20.6	16.9	24.3	1.85	3.70	Colorimetric with ppt.	
	µg/dl	115	94.3	136	10.5	21.0		
	µmol/l	20.1	16.5	23.7	1.80	3.60	Colorimetric without ppt.	
	µg/dl	112	91.8	132	10.0	20.0		

Abbott Architect c systems			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Lactate	mmol/l	1.58	1.30	1.86	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	14.2	11.6	16.8	1.30	2.60	
LD (LDH)	U/l	190	162	218	14.0	28.0	Abbott Architect LD 2
	U/l	189	161	217	14.0	28.0	L to P IFCC
	U/l	191	162	220	14.5	29.0	Lactate to Pyruvate methods
Lithium	mmol/l	1.01	0.889	1.13	0.060	0.120	Spectrophotometric
	mg/dl	0.701	0.617	0.785	0.042	0.084	
Magnesium	mmol/l	0.889	0.782	0.996	0.054	0.107	Arsenazo III
	mg/dl	2.16	1.90	2.42	0.130	0.260	
	mmol/l	0.895	0.788	1.00	0.053	0.105	Enzymatic
	mg/dl	2.17	1.91	2.43	0.130	0.260	
	mmol/l	0.866	0.762	0.970	0.052	0.104	Xylidyl Blue
	mg/dl	2.10	1.85	2.35	0.125	0.250	
Osmolality	mOsm/kg	289	231	347	29.0	58.0	Calculated
Phosphate, Inorganic	mmol/l	1.42	1.21	1.63	0.105	0.210	Phosphomolybdate enzymatic
	mg/dl	4.40	3.74	5.06	0.330	0.660	
	mmol/l	1.42	1.21	1.63	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.40	3.74	5.06	0.330	0.660	
Potassium	mmol/l	3.92	3.61	4.23	0.155	0.310	ISE method - indirect
Protein, Total	g/l	60.2	48.2	72.2	6.00	12.0	Abbott Architect total Protein 2
	g/dl	6.02	4.82	7.22	0.600	1.20	
	g/l	59.6	47.7	71.5	5.95	11.9	Biuret reaction, end point
	g/dl	5.96	4.77	7.15	0.595	1.19	
	g/l	62.6	50.1	75.1	6.25	12.5	Biuret reaction, kinetic
	g/dl	6.26	5.01	7.51	0.625	1.25	
PSA, Total	ng/ml	7.88	5.91	9.85	0.985	1.97	Abbott Architect/ Alinity
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
TIBC	μmol/l	40.8	32.2	49.4	4.30	8.60	FE+UIBC(saturation with iron)
	μg/dl	228	180	276	24.0	48.0	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Abbott Architect Triglyceride 2
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	0.973	0.817	1.13	0.079	0.157	Lipase/Glycerol Dehydrogenase
	mg/dl	86.1	72.3	99.9	6.90	13.8	
	mmol/l	0.979	0.822	1.14	0.081	0.161	Lipase/GPO-PAP no correction
	mg/dl	86.6	72.7	101	7.20	14.4	

Abbott Architect c systems			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	88.5	74.3	103	7.25	14.5	
Urea	mmol/l	7.54	6.41	8.67	0.565	1.13	Abbott Architect Urea Nitrogen 2
	mg/dl	45.3	38.5	52.1	3.40	6.80	
	mg/dl (BUN)	21.1	17.9	24.3	1.60	3.20	
	mmol/l	7.54	6.41	8.67	0.565	1.13	Urease, end point
	mg/dl	45.3	38.5	52.1	3.40	6.80	
	mg/dl (BUN)	21.1	17.9	24.3	1.60	3.20	
	mmol/l	7.27	6.18	8.36	0.545	1.09	Urease, kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mg/dl (BUN)	20.4	17.3	23.5	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.333	0.290	0.376	0.022	0.043	Abbott Architect Uric Acid 2
	mg/dl	5.59	4.86	6.32	0.365	0.730	
	mmol/l	0.333	0.290	0.376	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.59	4.86	6.32	0.365	0.730	
	mmol/l	0.337	0.293	0.381	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.66	4.92	6.40	0.370	0.740	
	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.70	4.96	6.44	0.370	0.740	
Zinc	µmol/l	24.3	19.4	29.2	2.45	4.90	Colorimetric with deprot.
	µg/dl	159	127	191	16.0	32.0	

Abbott Architect i Systems			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	16.0	12.0	20.0	2.00	4.00	Abbott Architect/Alinity
	pg/ml	12.5	9.38	15.6	1.55	3.10	
	ng/dl	1.25	0.938	1.56	0.155	0.310	
PSA, Total	ng/ml	7.64	5.73	9.55	0.955	1.91	Abbott Architect/ Alinity
Thyroid Stimulating Hormone (TSH)	µU/ml	1.17	0.936	1.40	0.115	0.230	Abbott Architect/ Alinity
Total T3	nmol/l	1.82	1.37	2.27	0.225	0.450	Abbott Architect/ Alinity
	ng/ml	1.18	0.885	1.48	0.150	0.300	
	ng/dl	118	88.5	148	15.0	30.0	
Total T4	nmol/l	87.1	65.3	109	11.0	21.9	Abbott Architect/ Alinity
	ng/ml	67.9	50.9	84.9	8.50	17.0	
	µg/dl	6.79	5.09	8.49	0.850	1.70	

Abbott Architect Systems(Archem Reagent)			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.7	34.6	46.8	3.05	6.10	Bromocresol Green
	g/dl	4.07	3.46	4.68	0.305	0.610	
Alkaline Phosphatase	U/l	173	147	199	13.0	26.0	AMP optimised to IFCC
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.02	0.806	1.23	0.105	0.210	Diazo with Sulphanilic Acid
	µmol/l	17.4	13.7	21.1	1.85	3.70	
Bilirubin, Total	mg/dl	2.11	1.67	2.55	0.220	0.440	Diazo with Sulphanilic Acid
	µmol/l	36.0	28.4	43.6	3.80	7.60	
Cholesterol	mmol/l	4.12	3.58	4.66	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	138	180	10.5	21.0	
CK, Total	U/l	219	180	258	19.5	39.0	CK-NAC substrate start (DGKC)
Copper	µmol/l	17.9	14.3	21.5	1.80	3.60	Colorimetric
	µg/dl	114	91.2	137	11.5	23.0	
Creatinine	mg/dl	1.37	1.10	1.64	0.135	0.270	Alkaline picrate no deproteinisation
	µmol/l	121	96.8	145	12.0	24.0	
gamma-GT	U/l	59	50	68	4.50	9.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.00	5.10	6.90	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
HDL-Cholesterol	mmol/l	1.24	1.05	1.43	0.095	0.190	HDL Ultra/Accel Selective Detergent
	mg/dl	47.9	40.7	55.1	3.60	7.20	
Iron	µmol/l	17.9	14.7	21.1	1.60	3.20	Colorimetric without ppt.
	µg/dl	100	82.0	118	9.00	18.0	
LD (LDH)	U/l	360	306	414	27.0	54.0	P to L German methods
Lipase	U/l	35	28	42	3.50	7.00	Colorimetric Randox
Magnesium	mmol/l	0.881	0.775	0.987	0.053	0.106	Xylidyl Blue
	mg/dl	2.14	1.88	2.40	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.48	1.26	1.70	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.59	3.90	5.28	0.345	0.690	
Protein, Total	g/l	56.9	45.5	68.3	5.70	11.4	Biuret reaction, end point
	g/dl	5.69	4.55	6.83	0.570	1.14	
Triglycerides	mmol/l	0.925	0.777	1.07	0.073	0.145	Lipase/GPO-PAP no correction
	mg/dl	81.9	68.8	95.0	6.55	13.1	
Urea	mmol/l	7.26	6.17	8.35	0.545	1.09	Urease, kinetic
	mg/dl	43.6	37.1	50.1	3.25	6.50	
	mg/dl (BUN)	20.3	17.3	23.3	1.50	3.00	

Abbott Architect Systems(Archem Reagent)				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.331	0.288	0.374	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.56	4.84	6.28	0.360	0.720	
Zinc	µmol/l	30.7	24.6	36.8	3.05	6.10	Colorimetric without deprot.
	µg/dl	200	160	240	20.0	40.0	

Advanced Ins. Micro Osmometer 3300/3320				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/ kg	298	238	358	30.0	60.0	Freezing point depression

Advanced Instruments Osmometer			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/ kg	296	237	355	29.5	59.0	Freezing point depression

Agappe Mispa CCXL			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	44.4	37.7	51.1	3.35	6.70	Agappe - Bromocresol Green
	g/dl	4.44	3.77	5.11	0.335	0.670	
Alkaline Phosphatase	U/l	224	190	258	17.0	34.0	Agappe - DGKC-SCE
ALT (GPT)	U/l	42	34	50	4.00	8.00	Agappe - IFCC
Amylase, Total	U/l	70	60	80	5.00	10.0	Agappe - CNPG3
AST (GOT)	U/l	33	26	40	3.50	7.00	Agappe - IFCC
Bilirubin, Direct	mg/dl	0.597	0.472	0.722	0.063	0.125	Agappe - DIAZO
	µmol/l	10.2	8.06	12.3	1.05	2.10	
Chloride	mmol/l	87.2	80.2	94.2	3.50	7.00	Agappe - THIOCYANATE
Cholesterol	mmol/l	4.00	3.48	4.52	0.260	0.520	Agappe - CHOD-PAP
	mg/dl	154	134	174	10.0	20.0	
CK, Total	U/l	227	186	268	20.5	41.0	Agappe - IFCC/KINETIC
Creatinine	mg/dl	1.42	1.14	1.70	0.140	0.280	Agappe - JAFFE'S KINETIC
	µmol/l	126	101	151	12.5	25.0	
gamma-GT	U/l	56	48	64	4.00	8.00	Agappe - SZASZ KINETIC
Glucose	mmol/l	5.99	5.09	6.89	0.450	0.900	Agappe - GOD-PAP
	mg/dl	108	91.8	124	8.00	16.0	
HDL-Cholesterol	mmol/l	1.32	1.12	1.52	0.100	0.200	Agappe - SELECTIVE INHIBITION
	mg/dl	51.0	43.4	58.6	3.80	7.60	
Iron	µmol/l	18.7	15.3	22.1	1.70	3.40	Agappe - CHROMAZUROL
	µg/dl	105	86.1	124	9.50	19.0	
LD (LDH)	U/l	415	353	477	31.0	62.0	Agappe - SCE
Lipase	U/l	26	21	31	2.50	5.00	Agappe - METHYL RESORUFIN
Magnesium	mmol/l	0.908	0.799	1.02	0.056	0.112	Agappe - XYLIDYL BLUE
	mg/dl	2.21	1.94	2.48	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.53	1.30	1.76	0.115	0.230	Agappe - PHOSPOHMOLYBDATE
	mg/dl	4.74	4.03	5.45	0.355	0.710	
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	Agappe - ISE DIRECT
Protein, Total	g/l	57.7	46.2	69.2	5.75	11.5	Agappe - BIURET
	g/dl	5.77	4.62	6.92	0.575	1.15	
Sodium	mmol/l	135	128	142	3.50	7.00	Agappe - ISE DIRECT
Triglycerides	mmol/l	0.885	0.743	1.03	0.073	0.145	Agappe - GPO - TOPS
	mg/dl	78.3	65.8	90.8	6.25	12.5	
Urea	mmol/l	6.76	5.75	7.77	0.505	1.01	Agappe - UREASE GLDH
	mg/dl	40.6	34.5	46.7	3.05	6.10	
	mg/dl (BUN)	18.9	16.1	21.7	1.40	2.80	

Agappe Mispa CCXL			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.370	0.322	0.418	0.024	0.048	Agappe - URICASE - PAP
	mg/dl	6.22	5.41	7.03	0.405	0.810	

Agappe Mispa CXL Pro			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.5	36.1	48.9	3.20	6.40	Agappe - Bromocresol Green
	g/dl	4.25	3.61	4.89	0.320	0.640	
Alkaline Phosphatase	U/l	241	205	277	18.0	36.0	Agappe - DGKC-SCE
ALT (GPT)	U/l	40	32	48	4.00	8.00	Agappe - IFCC
Amylase, Total	U/l	70	60	80	5.00	10.0	Agappe - CNPG3
AST (GOT)	U/l	35	28	42	3.50	7.00	Agappe - IFCC
Chloride	mmol/l	86.5	79.6	93.4	3.45	6.90	Agappe - THIOCYANATE
Cholesterol	mmol/l	4.03	3.51	4.55	0.260	0.520	Agappe - CHOD-PAP
	mg/dl	156	136	176	10.0	20.0	
CK, Total	U/l	219	180	258	19.5	39.0	Agappe - IFCC/KINETIC
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Agappe - ENZYMATIC
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.41	1.13	1.69	0.140	0.280	Agappe - JAFFE'S KINETIC
	µmol/l	125	100	150	12.5	25.0	
gamma-GT	U/l	58	49	67	4.50	9.00	Agappe - SZASZ KINETIC
Glucose	mmol/l	6.01	5.11	6.91	0.450	0.900	Agappe - GOD-PAP
	mg/dl	108	91.8	124	8.00	16.0	
HDL-Cholesterol	mmol/l	1.41	1.20	1.62	0.105	0.210	Agappe - SELECTIVE INHIBITION
	mg/dl	54.4	46.2	62.6	4.10	8.20	
Iron	µmol/l	18.5	15.2	21.8	1.65	3.30	Agappe - CHROMAZUROL
	µg/dl	103	84.5	122	9.50	19.0	
LD (LDH)	U/l	406	345	467	30.5	61.0	Agappe - SCE
Lipase	U/l	27	22	32	2.50	5.00	Agappe - METHYL RESORUFIN
Magnesium	mmol/l	0.895	0.788	1.00	0.053	0.105	Agappe - XYLIDYL BLUE
	mg/dl	2.17	1.91	2.43	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.54	1.31	1.77	0.115	0.230	Agappe - PHOSPOHMOLYBDATE
	mg/dl	4.77	4.05	5.49	0.360	0.720	
Potassium	mmol/l	3.83	3.52	4.14	0.155	0.310	Agappe - ISE DIRECT
Protein, Total	g/l	56.7	45.4	68.0	5.65	11.3	Agappe - BIURET
	g/dl	5.67	4.54	6.80	0.565	1.13	
Sodium	mmol/l	135	128	142	3.50	7.00	Agappe - ISE DIRECT
Urea	mmol/l	7.32	6.22	8.42	0.550	1.10	Agappe - UREASE GLDH
	mg/dl	44.0	37.4	50.6	3.30	6.60	
	mg/dl (BUN)	20.5	17.4	23.6	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.372	0.324	0.420	0.024	0.048	Agappe - URICASE - PAP
	mg/dl	6.25	5.44	7.06	0.405	0.810	

Agappe Mispa Nano			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.3	34.3	46.3	3.00	6.00	Agappe - Bromocresol Green
	g/dl	4.03	3.43	4.63	0.300	0.600	
	g/l	40.4	34.3	46.5	3.05	6.10	Bromocresol Green
	g/dl	4.04	3.43	4.65	0.305	0.610	
Alkaline Phosphatase	U/l	189	161	217	14.0	28.0	AMP optimised to IFCC
ALT (GPT)	U/l	43	34	52	4.50	9.00	Agappe - IFCC
	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Amylase, Total	U/l	74	63	85	5.50	11.0	Agappe - CNPG3
AST (GOT)	U/l	34	27	41	3.50	7.00	Agappe - IFCC
	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Calcium	mmol/l	2.21	1.99	2.43	0.110	0.220	Arsenazo III
	mg/dl	8.86	7.97	9.75	0.445	0.890	
Cholesterol	mmol/l	4.13	3.59	4.67	0.270	0.540	Agappe - CHOD-PAP
	mg/dl	159	138	180	10.5	21.0	
Creatinine	mg/dl	1.64	1.31	1.97	0.165	0.330	Agappe - ENZYMATIC
	µmol/l	145	116	174	14.5	29.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Agappe - JAFFE'S KINETIC
	µmol/l	128	102	154	13.0	26.0	
Glucose	mmol/l	6.13	5.21	7.05	0.460	0.920	Agappe - GOD-PAP
	mg/dl	110	93.5	127	8.50	17.0	
	mmol/l	6.26	5.32	7.20	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
HDL-Cholesterol	mmol/l	1.36	1.16	1.56	0.100	0.200	Agappe - SELECTIVE INHIBITION
	mg/dl	52.5	44.6	60.4	3.95	7.90	
Phosphate, Inorganic	mmol/l	1.51	1.28	1.74	0.115	0.230	Agappe - PHOSPOHMOLYBDATE
	mg/dl	4.68	3.98	5.38	0.350	0.700	
Protein, Total	g/l	56.1	44.9	67.3	5.60	11.2	Agappe - BIURET
	g/dl	5.61	4.49	6.73	0.560	1.12	
Triglycerides	mmol/l	0.967	0.812	1.12	0.077	0.153	Agappe - GPO - TOPS
	mg/dl	85.6	71.9	99.3	6.85	13.7	
Uric Acid (Urate)	mmol/l	0.357	0.311	0.403	0.023	0.046	Agappe - URICASE - PAP
	mg/dl	6.00	5.22	6.78	0.390	0.780	
	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.86	5.10	6.62	0.380	0.760	

AMS SAT Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cholesterol	mmol/l	4.11	3.58	4.64	0.265	0.530	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	138	180	10.5	21.0	
Glucose	mmol/l	6.38	5.42	7.34	0.480	0.960	Glucose oxidase
	mg/dl	115	97.8	132	8.50	17.0	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Uric Acid (Urate)	mmol/l	0.368	0.320	0.416	0.024	0.048	Uricase perox. no ascorb. ox.
	mg/dl	6.18	5.38	6.98	0.400	0.800	

ARJ A400/AT240			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
Glucose	mmol/l	6.02	5.12	6.92	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
Protein, Total	g/l	58.0	46.4	69.6	5.80	11.6	Biuret reaction, end point
	g/dl	5.80	4.64	6.96	0.580	1.16	
Urea	mmol/l	7.16	6.09	8.23	0.535	1.07	Urease, kinetic
	mg/dl	43.0	36.6	49.4	3.20	6.40	
	mg/dl (BUN)	20.1	17.1	23.1	1.50	3.00	

Audicom AC9000 ISE Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	99.7	91.7	108	4.15	8.30	ISE, direct
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Autolumo			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
A1000/2000/1820/1860/6200/6600							
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.2	15.2	25.2	2.50	5.00	AutoBio CLIA
	pg/ml	15.8	11.9	19.7	1.95	3.90	
	ng/dl	1.58	1.19	1.97	0.195	0.390	
Thyroid Stimulating Hormone (TSH)	µU/ml	1.77	1.42	2.12	0.175	0.350	AutoBio CLIA
Total T3	nmol/l	2.19	1.64	2.74	0.275	0.550	AutoBio CLIA
	ng/ml	1.43	1.07	1.79	0.180	0.360	
	ng/dl	143	107	179	18.0	36.0	

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Alkaline Phosphatase	U/l	190	162	218	14.0	28.0	AMP optimised to IFCC
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate no deproteinisation
	μmol/l	132	106	158	13.0	26.0	
Protein, Total	g/l	55.8	44.6	67.0	5.60	11.2	Biuret reaction, end point
	g/dl	5.58	4.46	6.70	0.560	1.12	

Beckman Access Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	17.1	12.8	21.4	2.15	4.30	Beckman Access/LXi725
	pg/ml	13.3	9.98	16.6	1.65	3.30	
	ng/dl	1.33	0.998	1.66	0.165	0.330	
PSA, Total	ng/ml	11.5	8.63	14.4	1.45	2.90	Beckman Access standardised to Hybritech
Thyroid Stimulating Hormone (TSH)	µU/ml	1.44	1.15	1.73	0.145	0.290	Access/LXi725 Fast TSH 2nd gen.
	µU/ml	1.43	1.14	1.72	0.145	0.290	Access/LXi725 hyper TSH 3rd gen.
	µU/ml	1.36	1.09	1.63	0.135	0.270	Beckman DXI600/800/ Access 2 (3rd IS)
Total T3	nmol/l	2.18	1.64	2.72	0.270	0.540	Beckman Access/LXi725
	ng/ml	1.42	1.07	1.77	0.175	0.350	
	ng/dl	142	107	177	17.5	35.0	
Total T4	nmol/l	97.1	72.8	121	12.0	23.9	Beckman Access/LXi725
	ng/ml	75.7	56.8	94.6	9.45	18.9	
	µg/dl	7.57	5.68	9.46	0.945	1.89	

Beckman AU Series (Archem Reagent)

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.5	33.6	45.4	2.95	5.90	Bromocresol Green
	g/dl	3.95	3.36	4.54	0.295	0.590	
Calcium	mmol/l	2.08	1.87	2.29	0.105	0.210	Arsenazo III
	mg/dl	8.34	7.51	9.17	0.415	0.830	
Uric Acid (Urate)	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.78	5.03	6.53	0.375	0.750	

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.300	0.600	
	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Purple
	g/dl	4.00	3.40	4.60	0.300	0.600	
	g/l	39.2	33.3	45.1	2.95	5.90	Nephelometric Assays
	g/dl	3.92	3.33	4.51	0.295	0.590	
Alkaline Phosphatase	U/l	189	161	217	14.0	28.0	AMP non-optimised
	U/l	194	165	223	14.5	29.0	AMP optimised to IFCC
	U/l	196	167	225	14.5	29.0	Beckman AMP (Calibrator)
	U/l	194	165	223	14.5	29.0	Beckman AMP (Extinction Coeff)
	U/l	187	159	215	14.0	28.0	Diethanolamine buffer, DEA
ALT (GPT)	U/l	43	34	52	4.50	9.00	Beckman (Extinction Coefficient)
	U/l	41	33	49	4.00	8.00	Beckman IFCC Ref. with P5P
	U/l	44	35	53	4.50	9.00	Beckman Mod. IFCC Ref. without P5P
	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	52	44	60	4.00	8.00	Immunoinhibition, EPS substrate
Amylase, Total	U/l	75	64	86	5.50	11.0	Amylolytic Methods
	U/l	75	64	86	5.50	11.0	Beckman CNPG3 (Extinction Coeff)
	U/l	73	62	84	5.50	11.0	Beckman CNPG3 (Master Cal)
	U/l	81	69	93	6.00	12.0	Beckman Coulter - blocked pNPG7
	U/l	77	65	89	6.00	12.0	Beckman maltotetraose
	U/l	83	71	95	6.00	12.0	Beckman Synchron AMY7
	U/l	78	66	90	6.00	12.0	Human CNPG3 (IFCC)
AST (GOT)	U/l	38	30	46	4.00	8.00	Beckman (Extinction Coefficient)
	U/l	39	31	47	4.00	8.00	Beckman Mod. IFCC Ref. without P5P
	U/l	37	30	44	3.50	7.00	Phosphate buffer, DGKC
	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
	U/l	37	30	44	3.50	7.00	Tris buffer, SCE
Bicarbonate	mmol/l	14.3	11.3	17.3	1.50	3.00	Colorimetric
	mmol/l	14.5	11.5	17.5	1.50	3.00	Enzymatic
	mmol/l	14.4	11.4	17.4	1.50	3.00	PEP Carboxylase
Bile Acids	µmol/l	25.2	20.2	30.2	2.50	5.00	Enzymatic Colorimetric
	µmol/l	26.3	21.0	31.6	2.65	5.30	Enzymatic Colorimetric - Sentinel
Bilirubin, Direct	mg/dl	1.19	0.940	1.44	0.125	0.250	Diazo with Dichloroaniline
	µmol/l	20.4	16.1	24.7	2.15	4.30	
	mg/dl	1.17	0.924	1.42	0.125	0.250	Diazo/Sulphanilic Beckman DxC
	µmol/l	20.0	15.8	24.2	2.10	4.20	
	mg/dl	1.17	0.924	1.42	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.0	15.8	24.2	2.10	4.20	

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Bilirubin, Direct	mg/dl	1.02	0.806	1.23	0.105	0.210	Oxidation to Biliverdin/Vanadate
	µmol/l	17.4	13.7	21.1	1.85	3.70	
Bilirubin, Total	mg/dl	1.77	1.40	2.14	0.185	0.370	Diazo with Dichloroaniline
	µmol/l	30.3	23.9	36.7	3.20	6.40	
	mg/dl	1.83	1.45	2.21	0.190	0.380	Diazo with Sulphanilic Acid
	µmol/l	31.3	24.7	37.9	3.30	6.60	
	mg/dl	1.94	1.53	2.35	0.205	0.410	Diazonium ion
	µmol/l	33.2	26.2	40.2	3.50	7.00	
	mg/dl	1.85	1.46	2.24	0.195	0.390	Dichlorophenyl Diazonium
	µmol/l	31.6	25.0	38.2	3.30	6.60	
	mg/dl	1.84	1.45	2.23	0.195	0.390	DPD (Beckman AU)
	µmol/l	31.5	24.9	38.1	3.30	6.60	
	mg/dl	1.83	1.45	2.21	0.190	0.380	Oxidation to Biliverdin/Vanadate
	µmol/l	31.2	24.6	37.8	3.30	6.60	
Calcium	mmol/l	2.17	1.95	2.39	0.110	0.220	Arsenazo III
	mg/dl	8.70	7.83	9.57	0.435	0.870	
	mmol/l	2.18	1.96	2.40	0.110	0.220	Cresolphthalein complexone
	mg/dl	8.74	7.87	9.61	0.435	0.870	
	mmol/l	2.18	1.96	2.40	0.110	0.220	Ion Selective Electrode
mg/dl	8.74	7.87	9.61	0.435	0.870		
Chloride	mmol/l	93.3	85.8	101	3.85	7.70	ISE, indirect
Cholesterol	mmol/l	4.30	3.74	4.86	0.280	0.560	Cholesterol Dehydrogenase
	mg/dl	166	144	188	11.0	22.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.26	3.71	4.81	0.275	0.550	Cholesterol Oxidase - IDMS
mg/dl	164	143	185	10.5	21.0		
Cholinesterase	U/l	5737	4590	6884	574	1147	Colorimetric - Butyrylthiocholine
	U/l	5580	4464	6696	558	1116	Colorimetric - Butyrythiochol. Dimension
CK, Total	U/l	230	189	271	20.5	41.0	Beckman CK-NAC (Extinction Coeff)
	U/l	226	185	267	20.5	41.0	Beckman CK-NAC (IFCC)
	U/l	231	189	273	21.0	42.0	CK-NAC (IFCC)
	U/l	212	174	250	19.0	38.0	CK-NAC serum start (DGKC)
	U/l	232	190	274	21.0	42.0	Monothioglycerol
Creatinine	mg/dl	1.45	1.16	1.74	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	128	102	154	13.0	26.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Alkaline picrate with deproteinisation
	µmol/l	128	102	154	13.0	26.0	

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Creatinine PAP method	
	µmol/l	132	106	158	13.0	26.0		
	mg/dl	1.48	1.18	1.78	0.150	0.300	Enzymatic UV method	
	µmol/l	131	105	157	13.0	26.0		
	mg/dl	1.40	1.12	1.68	0.140	0.280	IDMS traceable	
	µmol/l	124	99.2	149	12.5	25.0		
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked	
	µmol/l	128	102	154	13.0	26.0		
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked comp. (-26µmol/l)	
µmol/l	128	102	154	13.0	26.0			
D-3-Hydroxybutyrate	mg/dl	1.46	1.17	1.75	0.145	0.290	Jaffe rate blanked comp. (-33umol/l)	
	µmol/l	129	103	155	13.0	26.0		
	mg/dl	1.40	1.12	1.68	0.140	0.280	Jaffe rate comp. (-18umol/l)	
	µmol/l	124	99.2	149	12.5	25.0		
	mmol/l	0.290	0.247	0.333	0.022	0.043	Tris buffer 100mmol pH 8.5	
	gamma-GT	U/l	54	46	62	4.00	8.00	Beckman Szasz (Extinction Coeff.)
		U/l	53	45	61	4.00	8.00	DCL, gamma glut.-3-carb.-4-nitro.
		U/l	51	43	59	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
		U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
U/l		54	46	62	4.00	8.00	Gamma glutamyl-4-nitroanilide	
GLDH	U/l	14	11	17	1.50	3.00	Triethanolamine buffer	
Glucose	mmol/l	6.00	5.10	6.90	0.450	0.900	Glucose dehydrogenase	
	mg/dl	108	91.8	124	8.00	16.0		
	mmol/l	6.15	5.23	7.07	0.460	0.920	Glucose oxidase	
	mg/dl	111	94.4	128	8.50	17.0		
	mmol/l	6.06	5.15	6.97	0.455	0.910	GOD/02-Beckman method	
	mg/dl	109	92.7	125	8.00	16.0		
HDL-Cholesterol	mmol/l	5.95	5.06	6.84	0.445	0.890	Hexokinase	
	mg/dl	107	91.0	123	8.00	16.0		
	HDL-Cholesterol	mmol/l	1.32	1.12	1.52	0.100	0.200	Direct HDL, Clearance method
		mg/dl	51.0	43.4	58.6	3.80	7.60	
		mmol/l	1.28	1.09	1.47	0.095	0.190	Direct HDL, Immunoseparation
		mg/dl	49.4	42.0	56.8	3.70	7.40	
mmol/l		1.29	1.10	1.48	0.095	0.190	Direct HDL, PEGME	
mg/dl		49.8	42.3	57.3	3.75	7.50		
mmol/l		1.29	1.10	1.48	0.095	0.190	Direct HDL, PPD	
mg/dl		49.8	42.3	57.3	3.75	7.50		
mmol/l		1.45	1.23	1.67	0.110	0.220	HDL Ultra/Accel Selective Detergent	
mg/dl		56.0	47.6	64.4	4.20	8.40		

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Iron	μmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric with ppt.
	μg/dl	107	87.7	126	9.50	19.0	
	μmol/l	18.7	15.3	22.1	1.70	3.40	Colorimetric without ppt.
	μg/dl	105	86.1	124	9.50	19.0	
Lactate	mmol/l	1.47	1.21	1.73	0.130	0.260	Colorimetric - Lactate oxidase
	mg/dl	13.2	10.8	15.6	1.20	2.40	
	mmol/l	1.53	1.25	1.81	0.140	0.280	UV - LDH
	mg/dl	13.8	11.3	16.3	1.25	2.50	
LD (LDH)	U/l	183	156	210	13.5	27.0	L to P Beckman (Extinction Coeff)
	U/l	193	164	222	14.5	29.0	L to P IFCC
	U/l	194	165	223	14.5	29.0	Lactate to Pyruvate methods
	U/l	759	645	873	57.0	114	P to L SFBC / SEQC
Magnesium	mmol/l	0.916	0.806	1.03	0.057	0.114	Arsenazo III
	mg/dl	2.23	1.96	2.50	0.135	0.270	
	mmol/l	0.919	0.809	1.03	0.056	0.111	Calmagite
	mg/dl	2.23	1.96	2.50	0.135	0.270	
	mmol/l	1.01	0.889	1.13	0.060	0.120	Enzymatic
	mg/dl	2.45	2.16	2.74	0.145	0.290	
	mmol/l	0.917	0.807	1.03	0.057	0.113	Xylidyl Blue
	mg/dl	2.23	1.96	2.50	0.135	0.270	
Osmolality	mOsm/kg	291	233	349	29.0	58.0	Calculated
Phosphate, Inorganic	mmol/l	1.43	1.22	1.64	0.105	0.210	Beckman PHOSm kit (365nm)
	mg/dl	4.43	3.77	5.09	0.330	0.660	
	mmol/l	1.42	1.21	1.63	0.105	0.210	Phosphomolybdate enzymatic
	mg/dl	4.40	3.74	5.06	0.330	0.660	
	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.46	3.79	5.13	0.335	0.670	
Potassium	mmol/l	3.93	3.62	4.24	0.155	0.310	ISE method - indirect
Protein, Total	g/l	57.7	46.2	69.2	5.75	11.5	Biuret reaction, CX4/5/7
	g/dl	5.77	4.62	6.92	0.575	1.15	
	g/l	57.7	46.2	69.2	5.75	11.5	Biuret reaction, end point
	g/dl	5.77	4.62	6.92	0.575	1.15	
	g/l	57.8	46.2	69.4	5.80	11.6	Biuret reaction, kinetic
	g/dl	5.78	4.62	6.94	0.580	1.16	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
TIBC	μmol/l	39.5	31.2	47.8	4.15	8.30	Calculated from Transferrin
	μg/dl	221	175	267	23.0	46.0	

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
TIBC	μmol/l	46.1	36.4	55.8	4.85	9.70	Direct Colorimetric	
	μg/dl	258	204	312	27.0	54.0		
	μmol/l	45.1	35.6	54.6	4.75	9.50	FE+UIBC(saturation with iron)	
	μg/dl	252	199	305	26.5	53.0		
	μmol/l	47.7	37.7	57.7	5.00	10.0	Removal of excess free iron	
	μg/dl	267	211	323	28.0	56.0		
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GK UV. no correction	
	mg/dl	91.2	76.6	106	7.40	14.8		
	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GK UV., 0.11 mmol/l correction	
	mg/dl	88.5	74.3	103	7.25	14.5		
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/Glycerol Dehydrogenase	
	mg/dl	89.4	75.1	104	7.30	14.6		
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction	
	mg/dl	89.4	75.1	104	7.30	14.6		
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP, 0.11mmol/l correction	
	mg/dl	89.4	75.1	104	7.30	14.6		
	Urea	mmol/l	7.34	6.24	8.44	0.550	1.10	Beckman - Conductivity
		mg/dl	44.1	37.5	50.7	3.30	6.60	
mg/dl (BUN)		20.6	17.5	23.7	1.55	3.10		
mmol/l		7.30	6.21	8.39	0.545	1.09	Urease, end point	
mg/dl		43.9	37.3	50.5	3.30	6.60		
mg/dl (BUN)		20.4	17.3	23.5	1.55	3.10		
mmol/l		7.06	6.00	8.12	0.530	1.06	Urease, hypochlorite	
mg/dl		42.4	36.0	48.8	3.20	6.40		
mg/dl (BUN)		19.8	16.8	22.8	1.50	3.00		
mmol/l		7.25	6.16	8.34	0.545	1.09	Urease, kinetic	
mg/dl		43.6	37.1	50.1	3.25	6.50		
mg/dl (BUN)		20.3	17.3	23.3	1.50	3.00		
Uric Acid (Urate)		mmol/l	0.353	0.307	0.399	0.023	0.046	Reduction methods
		mg/dl	5.93	5.16	6.70	0.385	0.770	
		mmol/l	0.336	0.292	0.380	0.022	0.044	Uricase @ 293 nm
		mg/dl	5.64	4.91	6.37	0.365	0.730	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase perox. no ascorb. ox.	
	mg/dl	5.71	4.97	6.45	0.370	0.740		

Beckman Coulter AU Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.70	4.96	6.44	0.370	0.740	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.71	4.97	6.45	0.370	0.740	
Zinc	µmol/l	23.5	18.8	28.2	2.35	4.70	Colorimetric without deprot.
	µg/dl	153	122	184	15.5	31.0	

Beckman CX4/5/7/9/LX20			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	16.4	12.3	20.5	2.05	4.10	Beckman Dxl 600/800
	pg/ml	12.8	9.60	16.0	1.60	3.20	
	ng/dl	1.28	0.960	1.60	0.160	0.320	
PSA, Total	ng/ml	11.9	8.93	14.9	1.50	3.00	Beckman DXI standardised to Hybritech
Thyroid Stimulating Hormone (TSH)	µU/ml	1.39	1.11	1.67	0.140	0.280	Beckman DXI600/800/ Access 2 (3rd IS)

Beckman DxC600/DxC800			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.3	34.3	46.3	3.00	6.00	Bromocresol Purple
	g/dl	4.03	3.43	4.63	0.300	0.600	
Alkaline Phosphatase	U/l	182	155	209	13.5	27.0	AMP non-optimised
	U/l	181	154	208	13.5	27.0	AMP optimised to IFCC
Amylase, Total	U/l	82	70	94	6.00	12.0	Beckman Synchron AMY7
AST (GOT)	U/l	37	30	44	3.50	7.00	Beckman Mod. IFCC Ref. without P5P
Calcium	mmol/l	2.10	1.89	2.31	0.105	0.210	Ion Selective Electrode
	mg/dl	8.42	7.58	9.26	0.420	0.840	
Chloride	mmol/l	93.3	85.8	101	3.85	7.70	ISE, indirect
Cholesterol	mmol/l	4.10	3.57	4.63	0.265	0.530	Cholesterol Oxidase - Abell Kendall
	mg/dl	158	137	179	10.5	21.0	
Cholinesterase	U/l	5901	4721	7081	590	1180	Colorimetric - Butyrylthiocholine
CK, Total	U/l	229	188	270	20.5	41.0	Monothioglycerol
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	IDMS traceable
	µmol/l	132	106	158	13.0	26.0	
Glucose	mmol/l	5.93	5.04	6.82	0.445	0.890	Hexokinase
	mg/dl	107	91.0	123	8.00	16.0	
HDL-Cholesterol	mmol/l	1.33	1.13	1.53	0.100	0.200	Direct HDL, PPD
	mg/dl	51.3	43.6	59.0	3.85	7.70	
Iron	µmol/l	18.3	15.0	21.6	1.65	3.30	Colorimetric without ppt.
	µg/dl	102	83.6	120	9.00	18.0	
Lactate	mmol/l	1.56	1.28	1.84	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	14.1	11.6	16.6	1.25	2.50	
Magnesium	mmol/l	0.920	0.810	1.03	0.055	0.110	Calmagite
	mg/dl	2.24	1.97	2.51	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.41	1.20	1.62	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.37	3.71	5.03	0.330	0.660	
Potassium	mmol/l	3.86	3.55	4.17	0.155	0.310	ISE method - indirect
Protein, Total	g/l	55.9	44.7	67.1	5.60	11.2	Biuret reaction, CX4/5/7
	g/dl	5.59	4.47	6.71	0.560	1.12	
	g/l	57.9	46.3	69.5	5.80	11.6	Biuret reaction, end point
	g/dl	5.79	4.63	6.95	0.580	1.16	
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	93.8	78.8	109	7.60	15.2	
	mmol/l	0.968	0.813	1.12	0.076	0.152	Lipase/GPO-PAP no correction
	mg/dl	85.7	72.0	99.4	6.85	13.7	

Beckman DxC600/DxC800

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	7.47	6.35	8.59	0.560	1.12	Urease, kinetic
	mg/dl	44.9	38.2	51.6	3.35	6.70	
	mg/dl (BUN)	20.9	17.8	24.0	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.337	0.293	0.381	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.66	4.92	6.40	0.370	0.740	

BESIC CBS Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.894	0.805	0.983	0.045	0.089	Ion Selective Electrode
	mg/dl	3.58	3.22	3.94	0.180	0.360	
Chloride	mmol/l	97.5	89.7	105	3.75	7.50	ISE, direct
Potassium	mmol/l	3.95	3.63	4.27	0.160	0.320	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Biocare Biolyte/Statlyte			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	103	94.8	111	4.00	8.00	ISE, direct
Sodium	mmol/l	135	128	142	3.50	7.00	ISE method - direct

Biolabo Kenza 240TX			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	45	36	54	4.50	9.00	Tris buffer without P5P

Biomerieux Vidas/miniVidas/Vidas 3				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	19.3	14.5	24.1	2.40	4.80	bioMerieux, VIDAS-FT4N Kit
	pg/ml	15.1	11.3	18.9	1.90	3.80	
	ng/dl	1.51	1.13	1.89	0.190	0.380	
PSA, Total	ng/ml	9.68	7.26	12.1	1.21	2.42	bioMerieux VIDAS TPSA
Thyroid Stimulating Hormone (TSH)	µU/ml	1.66	1.33	1.99	0.165	0.330	bioMerieux VIDAS TSH
Total T3	nmol/l	2.01	1.51	2.51	0.250	0.500	bioMerieux, VIDAS
	ng/ml	1.31	0.983	1.64	0.165	0.330	
	ng/dl	131	98.3	164	16.5	33.0	
Total T4	nmol/l	86.5	64.9	108	10.8	21.5	bioMerieux, VIDAS
	ng/ml	67.5	50.6	84.4	8.45	16.9	
	µg/dl	6.75	5.06	8.44	0.845	1.69	



Biosino Zs-300 Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Glucose	mmol/l	5.81	4.94	6.68	0.435	0.870	Glucose oxidase
	mg/dl	105	89.3	121	8.00	16.0	

BioSystems A15			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.2	35.9	48.5	3.15	6.30	Bromocresol Green
	g/dl	4.22	3.59	4.85	0.315	0.630	
Alkaline Phosphatase	U/l	191	162	220	14.5	29.0	AMP optimised to IFCC
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.17	1.95	2.39	0.110	0.220	Arsenazo III
	mg/dl	8.70	7.83	9.57	0.435	0.870	
Cholesterol	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.10	3.57	4.63	0.265	0.530	Cholesterol Oxidase - IDMS
	mg/dl	158	137	179	10.5	21.0	
Creatinine	mg/dl	1.46	1.17	1.75	0.145	0.290	Jaffe rate blanked comp. (-33umol/l)
	µmol/l	129	103	155	13.0	26.0	
gamma-GT	U/l	51	43	59	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.02	5.12	6.92	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
Protein, Total	g/l	60.3	48.2	72.4	6.05	12.1	Biuret reaction, end point
	g/dl	6.03	4.82	7.24	0.605	1.21	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.08	6.02	8.14	0.530	1.06	Urease, end point
	mg/dl	42.6	36.2	49.0	3.20	6.40	
	mg/dl (BUN)	19.8	16.8	22.8	1.50	3.00	
	mmol/l	6.85	5.82	7.88	0.515	1.03	Urease, kinetic
	mg/dl	41.2	35.0	47.4	3.10	6.20	
	mg/dl (BUN)	19.2	16.3	22.1	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.357	0.311	0.403	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	6.00	5.22	6.78	0.390	0.780	
	mmol/l	0.356	0.310	0.402	0.023	0.046	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.98	5.20	6.76	0.390	0.780	

BioSystems A25			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.8	36.4	49.2	3.20	6.40	Bromocresol Green
	g/dl	4.28	3.64	4.92	0.320	0.640	
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.15	1.94	2.36	0.105	0.210	Arsenazo III
	mg/dl	8.62	7.76	9.48	0.430	0.860	
Cholesterol	mmol/l	4.29	3.73	4.85	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	166	144	188	11.0	22.0	
	mmol/l	4.40	3.83	4.97	0.285	0.570	Cholesterol Oxidase - IDMS
	mg/dl	170	148	192	11.0	22.0	
Creatinine	mg/dl	1.50	1.20	1.80	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	133	106	160	13.5	27.0	
	mg/dl	1.41	1.13	1.69	0.140	0.280	Jaffe rate blanked
	µmol/l	125	100	150	12.5	25.0	
	mg/dl	1.60	1.28	1.92	0.160	0.320	Jaffe rate blanked comp. (-33umol/l)
	µmol/l	142	114	170	14.0	28.0	
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.29	5.35	7.23	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
Protein, Total	g/l	60.4	48.3	72.5	6.05	12.1	Biuret reaction, end point
	g/dl	6.04	4.83	7.25	0.605	1.21	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.22	6.14	8.30	0.540	1.08	Urease, kinetic
	mg/dl	43.4	36.9	49.9	3.25	6.50	
	mg/dl	20.2	17.2	23.2	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.372	0.324	0.420	0.024	0.048	Uricase Perox. with ascorb. ox
	mg/dl	6.25	5.44	7.06	0.405	0.810	

BioSystems BA200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.8	36.4	49.2	3.20	6.40	Bromocresol Green
	g/dl	4.28	3.64	4.92	0.320	0.640	
ALT (GPT)	U/l	45	36	54	4.50	9.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Bilirubin, Total	mg/dl	1.67	1.32	2.02	0.175	0.350	Dichlorophenyl Diazonium
	µmol/l	28.5	22.5	34.5	3.00	6.00	
Calcium	mmol/l	2.09	1.88	2.30	0.105	0.210	Arsenazo III
	mg/dl	8.38	7.54	9.22	0.420	0.840	
Cholesterol	mmol/l	4.39	3.82	4.96	0.285	0.570	Cholesterol Oxidase - Abell Kendall
	mg/dl	169	147	191	11.0	22.0	
	mmol/l	4.52	3.93	5.11	0.295	0.590	Cholesterol Oxidase - IDMS
	mg/dl	174	151	197	11.5	23.0	
CK, Total	U/l	217	178	256	19.5	39.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.54	1.23	1.85	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	136	109	163	13.5	27.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate blanked
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Jaffe rate blanked comp. (-33umol/l)
	µmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	55	47	63	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.27	5.33	7.21	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
HDL-Cholesterol	mmol/l	1.34	1.14	1.54	0.100	0.200	Direct HDL, PPD
	mg/dl	51.7	43.9	59.5	3.90	7.80	
Iron	µmol/l	17.9	14.7	21.1	1.60	3.20	Colorimetric without ppt.
	µg/dl	100	82.0	118	9.00	18.0	
LD (LDH)	U/l	188	160	216	14.0	28.0	L to P IFCC
Phosphate, Inorganic	mmol/l	1.58	1.34	1.82	0.120	0.240	Phosphomolybdate UV
	mg/dl	4.90	4.17	5.63	0.365	0.730	
Protein, Total	g/l	59.1	47.3	70.9	5.90	11.8	Biuret reaction, end point
	g/dl	5.91	4.73	7.09	0.590	1.18	
Triglycerides	mmol/l	0.976	0.820	1.13	0.077	0.154	Lipase/GPO-PAP no correction
	mg/dl	86.4	72.6	100	6.80	13.6	

BioSystems BA200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	6.97	5.92	8.02	0.525	1.05	Urease, kinetic
	mg/dl	41.9	35.6	48.2	3.15	6.30	
	mg/dl (BUN)	19.5	16.6	22.4	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.376	0.327	0.425	0.025	0.049	Uricase perox. no ascorb. ox.
	mg/dl	6.32	5.50	7.14	0.410	0.820	
	mmol/l	0.377	0.328	0.426	0.025	0.049	Uricase Perox. with ascorb. ox
	mg/dl	6.33	5.51	7.15	0.410	0.820	

BioSystems BA400			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.9	35.6	48.2	3.15	6.30	Bromocresol Green
	g/dl	4.19	3.56	4.82	0.315	0.630	
Alkaline Phosphatase	U/l	190	162	218	14.0	28.0	AMP optimised to IFCC
	U/l	263	224	302	19.5	39.0	Diethanolamine buffer, DEA
ALT (GPT)	U/l	45	36	54	4.50	9.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	56	48	64	4.00	8.00	Immunoinhibition, EPS substrate
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.08	0.853	1.31	0.115	0.230	Dichlorophenyl Diazonium
	µmol/l	18.5	14.6	22.4	1.95	3.90	
Bilirubin, Total	mg/dl	1.70	1.34	2.06	0.180	0.360	Dichlorophenyl Diazonium
	µmol/l	29.0	22.9	35.1	3.05	6.10	
Calcium	mmol/l	2.12	1.91	2.33	0.105	0.210	Arsenazo III
	mg/dl	8.50	7.65	9.35	0.425	0.850	
Chloride	mmol/l	94.2	86.7	102	3.90	7.80	ISE, direct
Cholesterol	mmol/l	4.40	3.83	4.97	0.285	0.570	Cholesterol Oxidase - Abell Kendall
	mg/dl	170	148	192	11.0	22.0	
	mmol/l	4.46	3.88	5.04	0.290	0.580	Cholesterol Oxidase - IDMS
	mg/dl	172	150	194	11.0	22.0	
CK, Total	U/l	220	180	260	20.0	40.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.55	1.24	1.86	0.155	0.310	Creatinine PAP method
	µmol/l	137	110	164	13.5	27.0	
	mg/dl	1.46	1.17	1.75	0.145	0.290	Enzymatic UV method
	µmol/l	129	103	155	13.0	26.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Jaffe rate blanked
	µmol/l	133	106	160	13.5	27.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.20	5.27	7.13	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
HDL-Cholesterol	mmol/l	1.22	1.04	1.40	0.090	0.180	Direct HDL, Clearance method
	mg/dl	47.1	40.0	54.2	3.55	7.10	
	mmol/l	1.35	1.15	1.55	0.100	0.200	Direct HDL, PPD
	mg/dl	52.1	44.3	59.9	3.90	7.80	
Iron	µmol/l	17.3	14.2	20.4	1.55	3.10	Colorimetric without ppt.
	µg/dl	96.7	79.3	114	8.65	17.3	
LD (LDH)	U/l	401	341	461	30.0	60.0	Lactate to Pyruvate methods

BioSystems BA400			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
LD (LDH)	U/l	409	348	470	30.5	61.0	P to L German methods
Magnesium	mmol/l	0.937	0.825	1.05	0.057	0.113	Xylidyl Blue
	mg/dl	2.28	2.01	2.55	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.48	1.26	1.70	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.59	3.90	5.28	0.345	0.690	
Potassium	mmol/l	3.78	3.48	4.08	0.150	0.300	ISE method - direct
Protein, Total	g/l	59.8	47.8	71.8	6.00	12.0	Biuret reaction, end point
	g/dl	5.98	4.78	7.18	0.600	1.20	
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	0.998	0.838	1.16	0.081	0.162	Lipase/Glycerol Dehydrogenase
	mg/dl	88.3	74.2	102	6.85	13.7	
	mmol/l	0.980	0.823	1.14	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	86.7	72.8	101	7.15	14.3	
Urea	mmol/l	6.68	5.68	7.68	0.500	1.00	Urease, end point
	mg/dl	40.1	34.1	46.1	3.00	6.00	
	mg/dl (BUN)	18.7	15.9	21.5	1.40	2.80	
	mmol/l	6.93	5.89	7.97	0.520	1.04	Urease, kinetic
	mg/dl	41.6	35.4	47.8	3.10	6.20	
	mg/dl (BUN)	19.4	16.5	22.3	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.365	0.318	0.412	0.024	0.047	Uricase perox. no ascorb. ox.
	mg/dl	6.13	5.33	6.93	0.400	0.800	
	mmol/l	0.373	0.325	0.421	0.024	0.048	Uricase Perox. with ascorb. ox
	mg/dl	6.27	5.45	7.09	0.410	0.820	
	mmol/l	0.372	0.324	0.420	0.024	0.048	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	6.25	5.44	7.06	0.405	0.810	

BioSystems BTS Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	44.2	37.6	50.8	3.30	6.60	Bromocresol Green
	g/dl	4.42	3.76	5.08	0.330	0.660	
Alkaline Phosphatase	U/l	160	136	184	12.0	24.0	AMP optimised to IFCC
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Cholesterol	mmol/l	4.33	3.77	4.89	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	167	145	189	11.0	22.0	
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Jaffe rate blanked
	µmol/l	132	106	158	13.0	26.0	
Glucose	mmol/l	6.16	5.24	7.08	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
Magnesium	mmol/l	0.919	0.809	1.03	0.056	0.111	Xylidyl Blue
	mg/dl	2.23	1.96	2.50	0.135	0.270	
Protein, Total	g/l	61.7	49.4	74.0	6.15	12.3	Biuret reaction, end point
	g/dl	6.17	4.94	7.40	0.615	1.23	

Biotecnica/Wiener BT and CB Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.4	34.3	46.5	3.05	6.10	Bromocresol Green
	g/dl	4.04	3.43	4.65	0.305	0.610	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Calcium	mmol/l	2.19	1.97	2.41	0.110	0.220	Arsenazo III
	mg/dl	8.78	7.90	9.66	0.440	0.880	
	mmol/l	2.08	1.87	2.29	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.34	7.51	9.17	0.415	0.830	
Chloride	mmol/l	98.7	90.8	107	4.15	8.30	Colorimetric
Cholesterol	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.20	3.65	4.75	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	162	141	183	10.5	21.0	
Cholinesterase	U/l	5630	4504	6756	563	1126	Colorimetric - Butyrylthiocholine
CK, Total	U/l	234	192	276	21.0	42.0	CK-NAC (IFCC)
	U/l	232	190	274	21.0	42.0	CK-NAC substrate start (DGKC)
Creatinine	mg/dl	1.53	1.22	1.84	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Jaffe rate blanked
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma glut`-3-carb.-4-nitro.
	U/l	50	43	57	3.50	7.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.08	5.17	6.99	0.455	0.910	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.30	1.11	1.49	0.095	0.190	Direct HDL, Immunoseparation
	mg/dl	50.2	42.7	57.7	3.75	7.50	
LD (LDH)	U/l	217	184	250	16.5	33.0	L to P IFCC
	U/l	367	312	422	27.5	55.0	P to L German methods
	U/l	378	321	435	28.5	57.0	P to L Scandinavian & Dutch
Magnesium	mmol/l	0.877	0.772	0.982	0.053	0.105	Calmagite
	mg/dl	2.13	1.87	2.39	0.130	0.260	
	mmol/l	0.992	0.873	1.11	0.059	0.118	Enzymatic
	mg/dl	2.41	2.12	2.70	0.145	0.290	
	mmol/l	0.930	0.818	1.04	0.055	0.110	Xylidyl Blue
	mg/dl	2.26	1.99	2.53	0.135	0.270	
Potassium	mmol/l	4.00	3.68	4.32	0.160	0.320	ISE method - direct

Biotechnica/Wiener BT and CB Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Protein, Total	g/l	60.9	48.7	73.1	6.10	12.2	Biuret reaction, end point
	g/dl	6.09	4.87	7.31	0.610	1.22	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	88.5	74.3	103	7.25	14.5	
Urea	mmol/l	7.35	6.25	8.45	0.550	1.10	Urease, kinetic
	mg/dl	44.2	37.6	50.8	3.30	6.60	
	mg/dl	20.6	17.5	23.7	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.75	5.00	6.50	0.375	0.750	
	mmol/l	0.343	0.298	0.388	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.76	5.01	6.51	0.375	0.750	
	mmol/l	0.346	0.301	0.391	0.023	0.045	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.81	5.05	6.57	0.380	0.760	

BSI 2000/3000 Evolution			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Green
	g/dl	4.00	3.40	4.60	0.300	0.600	
Creatinine	mg/dl	1.41	1.13	1.69	0.140	0.280	Alkaline picrate no deproteinisation
	µmol/l	125	100	150	12.5	25.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked
	µmol/l	128	102	154	13.0	26.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.15	5.23	7.07	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
Protein, Total	g/l	60.8	48.6	73.0	6.10	12.2	Biuret reaction, end point
	g/dl	6.08	4.86	7.30	0.610	1.22	
Triglycerides	mmol/l	1.10	0.924	1.28	0.090	0.180	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	97.4	81.8	113	7.80	15.6	

Caretium XI-921/XI-931

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	1.03	0.927	1.13	0.050	0.100	Ion Selective Electrode
	mg/dl	4.13	3.72	4.54	0.205	0.410	
Chloride	mmol/l	97.6	89.8	105	3.70	7.40	ISE, direct
Potassium	mmol/l	3.90	3.59	4.21	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Clindiag SA-20			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Glucose	mmol/l	5.91	5.02	6.80	0.445	0.890	Glucose oxidase
	mg/dl	106	90.1	122	8.00	16.0	

Convergent Tech. Convergys ISE			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.943	0.849	1.04	0.049	0.097	Ion Selective Electrode
	mg/dl	3.78	3.40	4.16	0.190	0.380	
Chloride	mmol/l	95.2	87.6	103	3.90	7.80	ISE, direct
Potassium	mmol/l	3.87	3.56	4.18	0.155	0.310	ISE method - direct
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - direct

Cormay Accent Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Glucose	mmol/l	6.03	5.13	6.93	0.450	0.900	Glucose oxidase
	mg/dl	109	92.7	125	8.00	16.0	
Triglycerides	mmol/l	1.09	0.916	1.26	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	96.5	81.1	112	7.75	15.5	
Urea	mmol/l	7.14	6.07	8.21	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl (BUN)	20.0	17.0	23.0	1.50	3.00	

Cornley AFT/K-Lite/PR Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	99.6	91.6	108	4.20	8.40	ISE, direct
Potassium	mmol/l	3.75	3.45	4.05	0.150	0.300	ISE method - direct
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - direct

Cornley K-Lite 8 Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	94.5	86.9	102	3.75	7.50	ISE, direct
Potassium	mmol/l	3.72	3.42	4.02	0.150	0.300	ISE method - direct
Sodium	mmol/l	133	126	140	3.50	7.00	ISE method - direct

Dialab Autolyzer instruments			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.4	34.3	46.5	3.05	6.10	Bromocresol Green
	g/dl	4.04	3.43	4.65	0.305	0.610	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Glucose	mmol/l	6.21	5.28	7.14	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
Triglycerides	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
Urea	mmol/l	7.14	6.07	8.21	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl (BUN)	20.0	17.0	23.0	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.329	0.286	0.372	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.53	4.81	6.25	0.360	0.720	

Diamond Diagnostics ISE Lyte series				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.950	0.855	1.05	0.050	0.100	Ion Selective Electrode
	mg/dl	3.81	3.43	4.19	0.190	0.380	
Chloride	mmol/l	92.3	84.9	99.7	3.70	7.40	ISE, direct
Potassium	mmol/l	3.91	3.60	4.22	0.155	0.310	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

Diasorin Liaison XL			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.1	15.1	25.1	2.50	5.00	DiaSorin Liaison XL
	pg/ml	15.7	11.8	19.6	1.95	3.90	
	ng/dl	1.57	1.18	1.96	0.195	0.390	
Thyroid Stimulating Hormone (TSH)	µU/ml	1.64	1.31	1.97	0.165	0.330	DiaSorin Liaison XL

Diasys Respons			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.7	36.3	49.1	3.20	6.40	Bromocresol Green
	g/dl	4.27	3.63	4.91	0.320	0.640	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.08	0.853	1.31	0.115	0.230	Diazo with Dichloroaniline
	µmol/l	18.5	14.6	22.4	1.95	3.90	
	mg/dl	1.07	0.845	1.30	0.115	0.230	Dichlorophenyl Diazonium
	µmol/l	18.3	14.5	22.1	1.90	3.80	
Calcium	mmol/l	2.09	1.88	2.30	0.105	0.210	Phosphonazo
	mg/dl	8.38	7.54	9.22	0.420	0.840	
Cholesterol	mmol/l	4.53	3.94	5.12	0.295	0.590	Cholesterol Oxidase - Abell Kendall
	mg/dl	175	152	198	11.5	23.0	
Creatinine	mg/dl	1.50	1.20	1.80	0.150	0.300	Creatinine PAP method
	µmol/l	133	106	160	13.5	27.0	
Glucose	mmol/l	6.13	5.21	7.05	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, Immunoseparation
	mg/dl	54.0	45.9	62.1	4.05	8.10	
Phosphate, Inorganic	mmol/l	1.56	1.33	1.79	0.115	0.230	Phosphomolybdate UV
	mg/dl	4.84	4.11	5.57	0.365	0.730	
Protein, Total	g/l	56.9	45.5	68.3	5.70	11.4	Biuret reaction, end point
	g/dl	5.69	4.55	6.83	0.570	1.14	
Triglycerides	mmol/l	0.960	0.806	1.11	0.075	0.150	Lipase/GPO-PAP no correction
	mg/dl	85.0	71.4	98.6	6.80	13.6	
Urea	mmol/l	7.81	6.64	8.98	0.585	1.17	Urease, kinetic
	mg/dl	46.9	39.9	53.9	3.50	7.00	
	mg/dl	21.9	18.6	25.2	1.65	3.30	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.319	0.278	0.360	0.021	0.041	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.36	4.66	6.06	0.350	0.700	

Diasys/Bio Majesty JCA-BM6010/C				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.2	34.2	46.2	3.00	6.00	Bromocresol Green
	g/dl	4.02	3.42	4.62	0.300	0.600	
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.27	3.71	4.83	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	165	144	186	10.5	21.0	
Creatinine	mg/dl	1.54	1.23	1.85	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	136	109	163	13.5	27.0	
	mg/dl	1.62	1.30	1.94	0.160	0.320	Jaffe rate blanked
	µmol/l	143	114	172	14.5	29.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	5.90	5.02	6.78	0.440	0.880	Hexokinase
	mg/dl	106	90.1	122	8.00	16.0	
HDL-Cholesterol	mmol/l	1.25	1.06	1.44	0.095	0.190	Direct HDL, Immunoseparation
	mg/dl	48.3	41.1	55.5	3.60	7.20	
Potassium	mmol/l	4.00	3.68	4.32	0.160	0.320	ISE method - indirect
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	88.5	74.3	103	7.25	14.5	
Urea	mmol/l	7.21	6.13	8.29	0.540	1.08	Urease, kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl	20.2	17.2	23.2	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.338	0.294	0.382	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.68	4.94	6.42	0.370	0.740	

Diatron Pictus 400			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Cholesterol	mmol/l	3.96	3.45	4.47	0.255	0.510	Cholesterol Oxidase - Abell Kendall
	mg/dl	153	133	173	10.0	20.0	
Glucose	mmol/l	6.33	5.38	7.28	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
Urea	mmol/l	7.20	6.12	8.28	0.540	1.08	Urease, kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	

Diatron Pictus 500			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.29	3.73	4.85	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	166	144	188	11.0	22.0	
Glucose	mmol/l	6.11	5.19	7.03	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
Protein, Total	g/l	54.7	43.8	65.6	5.45	10.9	Biuret reaction, end point
	g/dl	5.47	4.38	6.56	0.545	1.09	
Urea	mmol/l	7.20	6.12	8.28	0.540	1.08	Urease, kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl	20.2	17.2	23.2	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.329	0.286	0.372	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.53	4.81	6.25	0.360	0.720	

Diatron Pictus 700			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cholesterol	mmol/l	4.18	3.64	4.72	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Glucose	mmol/l	6.09	5.18	7.00	0.455	0.910	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	88.5	74.3	103	7.25	14.5	
Urea	mmol/l	7.21	6.13	8.29	0.540	1.08	Urease, kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	

Diestro 103 Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.896	0.806	0.986	0.045	0.090	Ion Selective Electrode
	mg/dl	3.59	3.23	3.95	0.180	0.360	
Chloride	mmol/l	96.4	88.7	104	3.80	7.60	ISE, direct
Potassium	mmol/l	3.86	3.55	4.17	0.155	0.310	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Dirui CS-Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.6	34.5	46.7	3.05	6.10	Bromocresol Green
	g/dl	4.06	3.45	4.67	0.305	0.610	
ALT (GPT)	U/l	43	34	52	4.50	9.00	Colorimetric
	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Amylase, Total	U/l	83	71	95	6.00	12.0	Human CNPG3 (IFCC)
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	14.5	11.5	17.5	1.50	3.00	Enzymatic
Bilirubin, Direct	mg/dl	1.10	0.869	1.33	0.115	0.230	Diazo with Dichloroaniline
	µmol/l	18.8	14.9	22.7	1.95	3.90	
Bilirubin, Total	mg/dl	1.61	1.27	1.95	0.170	0.340	Dichlorophenyl Diazonium
	µmol/l	27.5	21.7	33.3	2.90	5.80	
	mg/dl	1.85	1.46	2.24	0.195	0.390	Oxidation to Biliverdin/Vanadate
	µmol/l	31.7	25.0	38.4	3.35	6.70	
Calcium	mmol/l	2.14	1.93	2.35	0.105	0.210	Arsenazo III
	mg/dl	8.58	7.72	9.44	0.430	0.860	
	mmol/l	2.20	1.98	2.42	0.110	0.220	Cresolphthalein complexone
	mg/dl	8.82	7.94	9.70	0.440	0.880	
Cholesterol	mmol/l	4.11	3.58	4.64	0.265	0.530	Cholesterol Dehydrogenase
	mg/dl	159	138	180	10.5	21.0	
	mmol/l	4.13	3.59	4.67	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	138	180	10.5	21.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	164	143	185	10.5	21.0	
CK, Total	U/l	229	188	270	20.5	41.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.46	1.17	1.75	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	129	103	155	13.0	26.0	
	mg/dl	1.40	1.12	1.68	0.140	0.280	Creatinine PAP method
	µmol/l	124	99.2	149	12.5	25.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked
	µmol/l	128	102	154	13.0	26.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	138	110	166	14.0	28.0	
gamma-GT	U/l	53	45	61	4.00	8.00	DCL, gamma glut.-3-carb.-4-nitro.
	U/l	51	43	59	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	56	48	64	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.18	5.25	7.11	0.465	0.930	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
	mmol/l	6.18	5.25	7.11	0.465	0.930	Hexokinase
	mg/dl	111	94.4	128	8.50	17.0	

Dirui CS-Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.28	1.09	1.47	0.095	0.190	Direct HDL, Clearance method
	mg/dl	49.4	42.0	56.8	3.70	7.40	
	mmol/l	1.25	1.06	1.44	0.095	0.190	Direct HDL, PPD
	mg/dl	48.3	41.1	55.5	3.60	7.20	
	mmol/l	1.38	1.17	1.59	0.105	0.210	HDL Ultra/Accel Selective Detergent
	mg/dl	53.3	45.3	61.3	4.00	8.00	
LD (LDH)	U/l	188	160	216	14.0	28.0	L to P IFCC
	U/l	198	168	228	15.0	30.0	Lactate to Pyruvate methods
	U/l	394	335	453	29.5	59.0	P to L German methods
Phosphate, Inorganic	mmol/l	1.49	1.27	1.71	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.62	3.93	5.31	0.345	0.690	
Protein, Total	g/l	58.3	46.6	70.0	5.85	11.7	Biuret reaction, end point
	g/dl	5.83	4.66	7.00	0.585	1.17	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.07	0.899	1.24	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	94.7	79.5	110	7.65	15.3	
	mmol/l	0.998	0.838	1.16	0.081	0.162	Lipase/Glycerol Dehydrogenase
	mg/dl	88.3	74.2	102	6.85	13.7	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.12	6.05	8.19	0.535	1.07	Urease, kinetic
	mg/dl	42.8	36.4	49.2	3.20	6.40	
	mg/dl (BUN)	19.9	16.9	22.9	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.70	4.96	6.44	0.370	0.740	
	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.86	5.10	6.62	0.380	0.760	
	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.75	5.00	6.50	0.375	0.750	

EBA 200

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.11	3.58	4.64	0.265	0.530	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	138	180	10.5	21.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.04	5.13	6.95	0.455	0.910	Glucose oxidase
	mg/dl	109	92.7	125	8.00	16.0	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.68	6.53	8.83	0.575	1.15	Urease, kinetic
	mg/dl	46.2	39.3	53.1	3.45	6.90	
	mg/dl	21.5	18.3	24.7	1.60	3.20	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.366	0.318	0.414	0.024	0.048	Uricase perox. no ascorb. ox.
	mg/dl	6.15	5.35	6.95	0.400	0.800	

Edif Sphera			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Calcium	mmol/l	2.19	1.97	2.41	0.110	0.220	Arsenazo III
	mg/dl	8.78	7.90	9.66	0.440	0.880	
Glucose	mmol/l	6.31	5.36	7.26	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
Urea	mmol/l	7.10	6.04	8.16	0.530	1.06	Urease, kinetic
	mg/dl	42.7	36.3	49.1	3.20	6.40	
	mg/dl	19.9	16.9	22.9	1.50	3.00	
	(BUN)						

EGY CHEM/ Bioelab Chemistry Analysers

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.305	0.610	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Arsenazo III
	mg/dl	8.74	7.87	9.61	0.435	0.870	
Cholesterol	mmol/l	4.13	3.59	4.67	0.270	0.540	Cholesterol Dehydrogenase
	mg/dl	159	138	180	10.5	21.0	
	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.44	3.86	5.02	0.290	0.580	Cholesterol Oxidase - IDMS
	mg/dl	171	149	193	11.0	22.0	
CK, Total	U/l	193	158	228	17.5	35.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Jaffe rate blanked
	µmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	55	47	63	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.31	5.36	7.26	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
Phosphate, Inorganic	mmol/l	1.78	1.51	2.05	0.135	0.270	Phosphomolybdate UV
	mg/dl	5.52	4.69	6.35	0.415	0.830	
Protein, Total	g/l	57.2	45.8	68.6	5.70	11.4	Biuret reaction, end point
	g/dl	5.72	4.58	6.86	0.570	1.14	
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	93.8	78.8	109	7.60	15.2	
	mmol/l	1.11	0.932	1.29	0.090	0.180	Lipase/GPO-PAP no correction
	mg/dl	98.2	82.5	114	7.90	15.8	
Urea	mmol/l	7.54	6.41	8.67	0.565	1.13	Urease, kinetic
	mg/dl	45.3	38.5	52.1	3.40	6.80	
	mg/dl	21.1	17.9	24.3	1.60	3.20	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.351	0.305	0.397	0.023	0.046	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.90	5.13	6.67	0.385	0.770	

ELITech Selectra Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Green
	g/dl	3.98	3.38	4.58	0.300	0.600	
Alkaline Phosphatase	U/l	189	161	217	14.0	28.0	AMP optimised to IFCC
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	Arsenazo III
	mg/dl	8.54	7.69	9.39	0.425	0.850	
Cholesterol	mmol/l	4.26	3.71	4.81	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
CK, Total	U/l	237	194	280	21.5	43.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Creatinine PAP method
	µmol/l	130	104	156	13.0	26.0	
Glucose	mmol/l	6.34	5.39	7.29	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
HDL-Cholesterol	mmol/l	1.28	1.09	1.47	0.095	0.190	Direct HDL, Clearance method
	mg/dl	49.4	42.0	56.8	3.70	7.40	
	mmol/l	1.36	1.16	1.56	0.100	0.200	Direct HDL, PEGME
	mg/dl	52.5	44.6	60.4	3.95	7.90	
Iron	µmol/l	18.1	14.8	21.4	1.65	3.30	Colorimetric without ppt.
	µg/dl	101	82.8	119	9.00	18.0	
LD (LDH)	U/l	198	168	228	15.0	30.0	L to P IFCC
Phosphate, Inorganic	mmol/l	1.53	1.30	1.76	0.115	0.230	Phosphomolybdate UV
	mg/dl	4.74	4.03	5.45	0.355	0.710	
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	93.8	78.8	109	7.60	15.2	
Urea	mmol/l	7.14	6.07	8.21	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl	20.0	17.0	23.0	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.373	0.325	0.421	0.024	0.048	Uricase perox. no ascorb. ox.
	mg/dl	6.27	5.45	7.09	0.410	0.820	
	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.86	5.10	6.62	0.380	0.760	

Erba EM Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.0	34.9	47.1	3.05	6.10	Bromocresol Green
	g/dl	4.10	3.49	4.71	0.305	0.610	
Alkaline Phosphatase	U/l	207	176	238	15.5	31.0	AMP non-optimised
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Amylase, Total	U/l	66	56	76	5.00	10.0	Human CNPG3 (IFCC)
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	0.913	0.721	1.11	0.099	0.197	Diazo with Sulphanilic Acid
	µmol/l	15.6	12.3	18.9	1.65	3.30	
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Arsenazo III
	mg/dl	8.74	7.87	9.61	0.435	0.870	
Chloride	mmol/l	93.8	86.3	101	3.60	7.20	ISE, direct
Cholesterol	mmol/l	4.18	3.64	4.72	0.270	0.540	Cholesterol Dehydrogenase
	mg/dl	161	140	182	10.5	21.0	
	mmol/l	4.05	3.52	4.58	0.265	0.530	Cholesterol Oxidase - Abell Kendall
	mg/dl	156	136	176	10.0	20.0	
	mmol/l	4.17	3.63	4.71	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	161	140	182	10.5	21.0	
gamma-GT	U/l	49	42	56	3.50	7.00	Gamma glut.-3-carb.-4-nitro.
Glucose	mmol/l	6.38	5.42	7.34	0.480	0.960	Glucose dehydrogenase
	mg/dl	115	97.8	132	8.50	17.0	
	mmol/l	6.38	5.42	7.34	0.480	0.960	Glucose oxidase
	mg/dl	115	97.8	132	8.50	17.0	
HDL-Cholesterol	mmol/l	1.44	1.22	1.66	0.110	0.220	Direct HDL, PEGME
	mg/dl	55.6	47.3	63.9	4.15	8.30	
LD (LDH)	U/l	393	334	452	29.5	59.0	P to L German methods
Magnesium	mmol/l	0.952	0.838	1.07	0.059	0.118	Xylidyl Blue
	mg/dl	2.31	2.03	2.59	0.140	0.280	
Phosphate, Inorganic	mmol/l	1.65	1.40	1.90	0.125	0.250	Phosphomolybdate UV
	mg/dl	5.12	4.35	5.89	0.385	0.770	
Potassium	mmol/l	3.74	3.44	4.04	0.150	0.300	ISE method - direct
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	0.883	0.742	1.02	0.069	0.137	Lipase/GK UV. no correction
	mg/dl	78.1	65.6	90.6	6.25	12.5	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	92.0	77.3	107	7.50	15.0	

Erba EM Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Triglycerides	mmol/l	0.971	0.816	1.13	0.080	0.159	Lipase/GPO-PAP no correction
	mg/dl	85.9	72.2	99.6	6.85	13.7	
Urea	mmol/l	7.39	6.28	8.50	0.555	1.11	Urease, end point
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	
	mmol/l	7.36	6.26	8.46	0.550	1.10	Urease, kinetic
	mg/dl	44.2	37.6	50.8	3.30	6.60	
	mg/dl (BUN)	20.6	17.5	23.7	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.364	0.317	0.411	0.024	0.047	Uricase perox. no ascorb. ox.
	mg/dl	6.12	5.32	6.92	0.400	0.800	
	mmol/l	0.361	0.314	0.408	0.024	0.047	Uricase Perox. with ascorb. ox
	mg/dl	6.06	5.27	6.85	0.395	0.790	
	mmol/l	0.361	0.314	0.408	0.024	0.047	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	6.06	5.27	6.85	0.395	0.790	

Erba Lyte ISE Electrolyte series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	96.7	89.0	104	3.65	7.30	ISE, direct
Potassium	mmol/l	3.86	3.55	4.17	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Erba Mannheim EC 90			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	95.2	87.6	103	3.90	7.80	ISE, direct
Potassium	mmol/l	3.85	3.54	4.16	0.155	0.310	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Erba XL Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.7	33.7	45.7	3.00	6.00	Bromocresol Green
	g/dl	3.97	3.37	4.57	0.300	0.600	
Alkaline Phosphatase	U/l	199	169	229	15.0	30.0	AMP non-optimised
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Beckman Mod. IFCC Ref. without P5P
	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.01	0.798	1.22	0.105	0.210	Diazo with Dichloroaniline
	µmol/l	17.2	13.6	20.8	1.80	3.60	
	mg/dl	1.02	0.806	1.23	0.105	0.210	Dichlorophenyl Diazonium
	µmol/l	17.5	13.8	21.2	1.85	3.70	
Calcium	mmol/l	2.15	1.94	2.36	0.105	0.210	Arsenazo III
	mg/dl	8.62	7.76	9.48	0.430	0.860	
	mmol/l	2.13	1.92	2.34	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.54	7.69	9.39	0.425	0.850	
Chloride	mmol/l	96.0	88.3	104	4.00	8.00	ISE, direct
Cholesterol	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Dehydrogenase
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.09	3.56	4.62	0.265	0.530	Cholesterol Oxidase - IDMS
	mg/dl	158	137	179	10.5	21.0	
CK, Total	U/l	238	195	281	21.5	43.0	CK-NAC serum start (DGKC)
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Alkaline picrate with deproteinisation
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.57	1.26	1.88	0.155	0.310	Creatinine PAP method
	µmol/l	139	111	167	14.0	28.0	
	mg/dl	1.40	1.12	1.68	0.140	0.280	Enzymatic UV method
	µmol/l	124	99.2	149	12.5	25.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Jaffe rate blanked
	µmol/l	138	110	166	14.0	28.0	
gamma-GT	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate comp. (-18umol/l)
	µmol/l	131	105	157	13.0	26.0	
Glucose	U/l	56	48	64	4.00	8.00	Gamma glut`3-carb`-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.44	5.47	7.41	0.485	0.970	Glucose dehydrogenase
	mg/dl	116	98.6	133	8.50	17.0	

Erba XL Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Glucose	mmol/l	6.28	5.34	7.22	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
	mmol/l	6.43	5.47	7.39	0.480	0.960	Hexokinase
	mg/dl	116	98.6	133	8.50	17.0	
Iron	µmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric without ppt.
	µg/dl	107	87.7	126	9.50	19.0	
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC
	U/l	391	332	450	29.5	59.0	P to L German methods
Magnesium	mmol/l	0.933	0.821	1.05	0.059	0.117	Xylidyl Blue
	mg/dl	2.27	2.00	2.54	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.58	1.34	1.82	0.120	0.240	Phosphomolybdate UV
	mg/dl	4.90	4.17	5.63	0.365	0.730	
Potassium	mmol/l	3.77	3.47	4.07	0.150	0.300	ISE method - direct
Protein, Total	g/l	58.7	47.0	70.4	5.85	11.7	Biuret reaction, end point
	g/dl	5.87	4.70	7.04	0.585	1.17	
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/Glycerol Dehydrogenase
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	92.9	78.0	108	7.55	15.1	
Urea	mmol/l	7.33	6.23	8.43	0.550	1.10	Urease, end point
	mg/dl	44.1	37.5	50.7	3.30	6.60	
	mg/dl (BUN)	20.5	17.4	23.6	1.55	3.10	
	mmol/l	7.30	6.21	8.39	0.545	1.09	Urease, kinetic
	mg/dl	43.9	37.3	50.5	3.30	6.60	
	mg/dl (BUN)	20.4	17.3	23.5	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.368	0.320	0.416	0.024	0.048	Uricase perox. no ascorb. ox.
	mg/dl	6.18	5.38	6.98	0.400	0.800	
	mmol/l	0.359	0.312	0.406	0.024	0.047	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	6.03	5.25	6.81	0.390	0.780	

Erba-Chem EC-5/EC-7			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.9	34.8	47.0	3.05	6.10	Bromocresol Green
	g/dl	4.09	3.48	4.70	0.305	0.610	
Bilirubin, Direct	mg/dl	0.983	0.777	1.19	0.104	0.207	Diazo with Sulphanilic Acid
	µmol/l	16.8	13.3	20.3	1.75	3.50	
Calcium	mmol/l	2.28	2.05	2.51	0.115	0.230	Arsenazo III
	mg/dl	9.14	8.23	10.1	0.480	0.960	
Cholesterol	mmol/l	4.38	3.81	4.95	0.285	0.570	Cholesterol Oxidase - Abell Kendall
	mg/dl	169	147	191	11.0	22.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.44	1.15	1.73	0.145	0.290	Jaffe rate blanked
	µmol/l	127	102	152	12.5	25.0	
Glucose	mmol/l	6.23	5.30	7.16	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
Protein, Total	g/l	61.2	49.0	73.4	6.10	12.2	Agappe - BIURET
	g/dl	6.12	4.90	7.34	0.610	1.22	
	g/l	61.8	49.4	74.2	6.20	12.4	Biuret reaction, end point
	g/dl	6.18	4.94	7.42	0.620	1.24	
Urea	mmol/l	7.20	6.12	8.28	0.540	1.08	Urease, kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.86	5.10	6.62	0.380	0.760	

Erma EL-120			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.955	0.860	1.05	0.048	0.095	Ion Selective Electrode
	mg/dl	3.83	3.45	4.21	0.190	0.380	
Chloride	mmol/l	98.6	90.7	107	4.20	8.40	ISE, direct
Potassium	mmol/l	3.95	3.63	4.27	0.160	0.320	ISE method - direct
Sodium	mmol/l	135	128	142	3.50	7.00	ISE method - direct

Exias e I 1			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.829	0.746	0.912	0.042	0.083	Ion Selective Electrode
	mg/dl	3.32	2.99	3.65	0.165	0.330	
Chloride	mmol/l	93.9	86.4	101	3.55	7.10	ISE, direct
Potassium	mmol/l	3.89	3.58	4.20	0.155	0.310	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Fiske Micro Osmometer 210			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/ kg	301	241	361	30.0	60.0	Freezing point depression

Fortress Diagnostics Electalyte-500			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	100	92.0	108	4.00	8.00	ISE, direct
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - direct

Fortress Diagnostics Monarch			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.2	35.0	47.4	3.10	6.20	Bromocresol Green
	g/dl	4.12	3.50	4.74	0.310	0.620	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Bilirubin, Total	mg/dl	1.64	1.30	1.98	0.170	0.340	Dichlorophenyl Diazonium
	µmol/l	28.0	22.1	33.9	2.95	5.90	
Calcium	mmol/l	2.11	1.90	2.32	0.105	0.210	Arsenazo III
	mg/dl	8.46	7.61	9.31	0.425	0.850	
Chloride	mmol/l	102	93.8	110	4.00	8.00	ISE, direct
Cholesterol	mmol/l	4.14	3.60	4.68	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	139	181	10.5	21.0	
	mmol/l	4.14	3.60	4.68	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	160	139	181	10.5	21.0	
Creatinine	mg/dl	1.56	1.25	1.87	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Enzymatic UV method
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate blanked
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	U/l	50	43	57	3.50	7.00	Gamma glut`-3-carb`-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.20	5.27	7.13	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Sodium	mmol/l	147	140	154	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	93.8	78.8	109	7.60	15.2	
Urea	mmol/l	7.27	6.18	8.36	0.545	1.09	Urease, kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mg/dl	20.4	17.3	23.5	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.348	0.303	0.393	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.85	5.09	6.61	0.380	0.760	
	mmol/l	0.354	0.308	0.400	0.023	0.046	Uricase Perox. with ascorb. ox
	mg/dl	5.95	5.18	6.72	0.385	0.770	
	mmol/l	0.341	0.297	0.385	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.73	4.99	6.47	0.370	0.740	

FUJI DRI-CHEM series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	47.8	40.6	55.0	3.60	7.20	Bromocresol Green
	g/dl	4.78	4.06	5.50	0.360	0.720	
Alkaline Phosphatase	U/l	181	154	208	13.5	27.0	Fuji Dri-Chem JSCC
Chloride	mmol/l	94.4	86.8	102	3.80	7.60	ISE, indirect
Glucose	mmol/l	6.31	5.36	7.26	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
Potassium	mmol/l	3.85	3.54	4.16	0.155	0.310	ISE method - indirect
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - indirect



Fujirebio Lumipulse GSeries			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Thyroid Stimulating Hormone (TSH)	µU/ml	1.27	1.02	1.52	0.125	0.250	Fujirebio Lumipulse G Series

Furuno CA Instruments			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	38.6	32.8	44.4	2.90	5.80	Bromocresol Green
	g/dl	3.86	3.28	4.44	0.290	0.580	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Bilirubin, Total	mg/dl	1.68	1.33	2.03	0.175	0.350	Oxidation to Biliverdin/Vanadate
	µmol/l	28.8	22.8	34.8	3.00	6.00	
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Arsenazo III
	mg/dl	8.74	7.87	9.61	0.435	0.870	
Cholesterol	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
Creatinine	mg/dl	1.42	1.14	1.70	0.140	0.280	Creatinine PAP method
	µmol/l	126	101	151	12.5	25.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Jaffe rate blanked
	µmol/l	134	107	161	13.5	27.0	
gamma-GT	U/l	51	43	59	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
Glucose	mmol/l	6.11	5.19	7.03	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
	mmol/l	5.96	5.07	6.85	0.445	0.890	Hexokinase
	mg/dl	107	91.0	123	8.00	16.0	
HDL-Cholesterol	mmol/l	1.33	1.13	1.53	0.100	0.200	Direct HDL, Immunoseparation
	mg/dl	51.3	43.6	59.0	3.85	7.70	
Phosphate, Inorganic	mmol/l	1.33	1.13	1.53	0.100	0.200	Phosphomolybdate UV
	mg/dl	4.12	3.50	4.74	0.310	0.620	
Protein, Total	g/l	55.6	44.5	66.7	5.55	11.1	Biuret reaction, end point
	g/dl	5.56	4.45	6.67	0.555	1.11	
Triglycerides	mmol/l	0.988	0.830	1.15	0.081	0.162	Lipase/GPO-PAP no correction
	mg/dl	87.4	73.4	101	6.80	13.6	
Urea	mmol/l	7.23	6.15	8.31	0.540	1.08	Urease, kinetic
	mg/dl	43.5	37.0	50.0	3.25	6.50	
	mg/dl	20.3	17.3	23.3	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.86	5.10	6.62	0.380	0.760	
	mmol/l	0.377	0.328	0.426	0.025	0.049	Uricase Perox. with ascorb. ox
	mg/dl	6.33	5.51	7.15	0.410	0.820	
	mmol/l	0.328	0.285	0.371	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.51	4.79	6.23	0.360	0.720	

Genrui/Genius GE Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Potassium	mmol/l	3.77	3.47	4.07	0.150	0.300	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Gonotec Osmomat 3000 Basic			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/ kg	300	240	360	30.0	60.0	Freezing point depression

Hitachi Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.5	34.4	46.6	3.05	6.10	Bromocresol Green
	g/dl	4.05	3.44	4.66	0.305	0.610	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Bilirubin, Total	mg/dl	1.60	1.26	1.94	0.170	0.340	Diazo with Dichloroaniline
	µmol/l	27.4	21.6	33.2	2.90	5.80	
	mg/dl	1.75	1.38	2.12	0.185	0.370	Diazo with Sulphanilic Acid
	µmol/l	29.9	23.6	36.2	3.15	6.30	
Calcium	mmol/l	2.08	1.87	2.29	0.105	0.210	Arsenazo III
	mg/dl	8.34	7.51	9.17	0.415	0.830	
Chloride	mmol/l	91.4	84.1	98.7	3.65	7.30	ISE, indirect
Cholesterol	mmol/l	4.07	3.54	4.60	0.265	0.530	Cholesterol Dehydrogenase
	mg/dl	157	137	177	10.0	20.0	
	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	164	143	185	10.5	21.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.42	1.14	1.70	0.140	0.280	Jaffe rate blanked
	µmol/l	126	101	151	12.5	25.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	52	44	60	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.25	5.31	7.19	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
HDL-Cholesterol	mmol/l	1.31	1.11	1.51	0.100	0.200	Direct HDL, Clearance method
	mg/dl	50.6	43.0	58.2	3.80	7.60	
	mmol/l	1.38	1.17	1.59	0.105	0.210	Direct HDL, Immunoseparation
	mg/dl	53.3	45.3	61.3	4.00	8.00	
Iron	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.6	127	9.50	19.0	
LD (LDH)	U/l	208	177	239	15.5	31.0	L to P IFCC
Phosphate, Inorganic	mmol/l	1.56	1.33	1.79	0.115	0.230	Phosphomolybdate UV
	mg/dl	4.84	4.11	5.57	0.365	0.730	
Potassium	mmol/l	3.98	3.66	4.30	0.160	0.320	ISE method - indirect
Protein, Total	g/l	58.6	46.9	70.3	5.85	11.7	Biuret reaction, end point
	g/dl	5.86	4.69	7.03	0.585	1.17	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect

Hitachi Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	93.8	78.8	109	7.60	15.2	
Urea	mmol/l	7.31	6.21	8.41	0.550	1.10	Urease, end point
	mg/dl	43.9	37.3	50.5	3.30	6.60	
	mg/dl (BUN)	20.5	17.4	23.6	1.55	3.10	
	mmol/l	7.13	6.06	8.20	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl (BUN)	20.0	17.0	23.0	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.335	0.291	0.379	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.63	4.90	6.36	0.365	0.730	
	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.347	0.302	0.392	0.023	0.045	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.83	5.07	6.59	0.380	0.760	

Horiba ABX Pentra C200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Green
	g/dl	3.98	3.38	4.58	0.300	0.600	
Glucose	mmol/l	6.37	5.41	7.33	0.480	0.960	Glucose oxidase
	mg/dl	115	97.8	132	8.50	17.0	

Horiba ABX Pentra C400			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Green
	g/dl	4.00	3.40	4.60	0.300	0.600	
Alkaline Phosphatase	U/l	179	152	206	13.5	27.0	AMP optimised to IFCC
ALT (GPT)	U/l	44	35	53	4.50	9.00	Tris buffer without P5P
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.31	1.03	1.59	0.140	0.280	Diazo with Dichloroaniline
	µmol/l	22.4	17.7	27.1	2.35	4.70	
Calcium	mmol/l	2.24	2.02	2.46	0.110	0.220	Arsenazo III
	mg/dl	8.98	8.08	9.88	0.450	0.900	
Cholesterol	mmol/l	4.46	3.88	5.04	0.290	0.580	Cholesterol Oxidase - Abell Kendall
	mg/dl	172	150	194	11.0	22.0	
CK, Total	U/l	219	180	258	19.5	39.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.53	1.22	1.84	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	135	108	162	13.5	27.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	51	43	59	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.35	5.40	7.30	0.475	0.950	Glucose oxidase
	mg/dl	114	96.9	131	8.50	17.0	
	mmol/l	6.48	5.51	7.45	0.485	0.970	Hexokinase
	mg/dl	117	99.5	135	9.00	18.0	
HDL-Cholesterol	mmol/l	1.43	1.22	1.64	0.105	0.210	Direct HDL, PPD
	mg/dl	55.2	46.9	63.5	4.15	8.30	
	mmol/l	1.45	1.23	1.67	0.110	0.220	HDL Ultra/Accel Selective Detergent
	mg/dl	56.0	47.6	64.4	4.20	8.40	
Iron	µmol/l	19.8	16.2	23.4	1.80	3.60	Colorimetric without ppt.
	µg/dl	111	91.0	131	10.0	20.0	
LD (LDH)	U/l	215	183	247	16.0	32.0	L to P IFCC
Magnesium	mmol/l	0.929	0.818	1.04	0.056	0.111	Xylidyl Blue
	mg/dl	2.26	1.99	2.53	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.75	1.49	2.01	0.130	0.260	Phosphomolybdate UV
	mg/dl	5.43	4.62	6.24	0.405	0.810	
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	ISE method - direct
Protein, Total	g/l	60.0	48.0	72.0	6.00	12.0	Biuret reaction, end point
	g/dl	6.00	4.80	7.20	0.600	1.20	
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.0	108	7.55	15.1	

Horiba ABX Pentra C400

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	6.95	5.91	7.99	0.520	1.04	Urease, kinetic
	mg/dl	41.8	35.5	48.1	3.15	6.30	
	mg/dl (BUN)	19.5	16.6	22.4	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.325	0.283	0.367	0.021	0.042	Uricase perox. no ascorb. ox.
	mg/dl	5.46	4.75	6.17	0.355	0.710	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.71	4.97	6.45	0.370	0.740	
	mmol/l	0.322	0.280	0.364	0.021	0.042	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.41	4.71	6.11	0.350	0.700	

HTI BioChem FC Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Glucose	mmol/l	6.49	5.52	7.46	0.485	0.970	Glucose oxidase
	mg/dl	117	99.5	135	9.00	18.0	
Urea	mmol/l	6.58	5.59	7.57	0.495	0.990	Urease, kinetic
	mg/dl	39.5	33.6	45.4	2.95	5.90	
	mg/dl (BUN)	18.4	15.6	21.2	1.40	2.80	

Human Humalyte			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	97.0	89.2	105	4.00	8.00	ISE, direct
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Human Humalyzer Primus/2000/3000/3500

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P
Cholesterol	mmol/l	4.18	3.64	4.72	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Creatinine	mg/dl	1.38	1.10	1.66	0.140	0.280	Alkaline picrate no deproteinisation
	μmol/l	122	97.6	146	12.0	24.0	
Glucose	mmol/l	6.01	5.11	6.91	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	88.5	74.3	103	7.25	14.5	

Human Humastar 100/200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.2	34.2	46.2	3.00	6.00	Bromocresol Green
	g/dl	4.02	3.42	4.62	0.300	0.600	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.30	1.03	1.57	0.135	0.270	Diazo with Sulphanilic Acid
	µmol/l	22.2	17.5	26.9	2.35	4.70	
	mg/dl	1.19	0.940	1.44	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.4	16.1	24.7	2.15	4.30	
Bilirubin, Total	mg/dl	1.95	1.54	2.36	0.205	0.410	Dichlorophenyl Diazonium
	µmol/l	33.4	26.4	40.4	3.50	7.00	
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Arsenazo III
	mg/dl	8.74	7.87	9.61	0.435	0.870	
	mmol/l	2.12	1.91	2.33	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.50	7.65	9.35	0.425	0.850	
Cholesterol	mmol/l	4.27	3.71	4.83	0.280	0.560	Cholesterol Dehydrogenase
	mg/dl	165	144	186	10.5	21.0	
	mmol/l	4.19	3.65	4.73	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	162	141	183	10.5	21.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	5.95	5.06	6.84	0.445	0.890	Glucose oxidase
	mg/dl	107	91.0	123	8.00	16.0	
HDL-Cholesterol	mmol/l	1.26	1.07	1.45	0.095	0.190	Direct HDL, PEGME
	mg/dl	48.6	41.3	55.9	3.65	7.30	
Protein, Total	g/l	59.7	47.8	71.6	5.95	11.9	Biuret reaction, end point
	g/dl	5.97	4.78	7.16	0.595	1.19	
Triglycerides	mmol/l	1.08	0.907	1.25	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.3	111	7.70	15.4	
Urea	mmol/l	7.15	6.08	8.22	0.535	1.07	Urease, kinetic
	mg/dl	43.0	36.6	49.4	3.20	6.40	
	mg/dl	20.0	17.0	23.0	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.357	0.311	0.403	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	6.00	5.22	6.78	0.390	0.780	
	mmol/l	0.335	0.291	0.379	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.63	4.90	6.36	0.365	0.730	
	mmol/l	0.366	0.318	0.414	0.024	0.048	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	6.15	5.35	6.95	0.400	0.800	

Humastar 600			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.300	0.600	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.26	3.71	4.81	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.21	5.28	7.14	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
HDL-Cholesterol	mmol/l	1.22	1.04	1.40	0.090	0.180	Direct HDL, Clearance method
	mg/dl	47.1	40.0	54.2	3.55	7.10	
Protein, Total	g/l	60.0	48.0	72.0	6.00	12.0	Biuret reaction, end point
	g/dl	6.00	4.80	7.20	0.600	1.20	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	6.92	5.88	7.96	0.520	1.04	Urease, kinetic
	mg/dl	41.6	35.4	47.8	3.10	6.20	
	mg/dl (BUN)	19.4	16.5	22.3	1.45	2.90	

I.S.E srl Miura			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.300	0.600	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.07	1.86	2.28	0.105	0.210	Arsenazo III
	mg/dl	8.30	7.47	9.13	0.415	0.830	
Cholesterol	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
Creatinine	mg/dl	1.46	1.17	1.75	0.145	0.290	Jaffe rate blanked
	μmol/l	129	103	155	13.0	26.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.05	5.14	6.96	0.455	0.910	Glucose oxidase
	mg/dl	109	92.7	125	8.00	16.0	
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
Urea	mmol/l	6.99	5.94	8.04	0.525	1.05	Urease, kinetic
	mg/dl	42.0	35.7	48.3	3.15	6.30	
	mg/dl (BUN)	19.6	16.7	22.5	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.341	0.297	0.385	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.73	4.99	6.47	0.370	0.740	

IL Gem Premier 3000/3500			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.893	0.804	0.982	0.045	0.089	Ion Selective Electrode
	mg/dl	3.58	3.22	3.94	0.180	0.360	
Potassium	mmol/l	3.79	3.49	4.09	0.150	0.300	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

IL ILab 600/650/Aries/Taurus			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Albumin	g/l	40.6	34.5	46.7	3.05	6.10	Bromocresol Green	
	g/dl	4.06	3.45	4.67	0.305	0.610		
Alkaline Phosphatase	U/l	187	159	215	14.0	28.0	AMP optimised to IFCC	
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P	
Amylase, Total	U/l	76	65	87	5.50	11.0	I.L. 2-chloro-pNPG3	
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P	
Bilirubin, Direct	mg/dl	0.819	0.647	0.991	0.086	0.172	Diazo with Sulphanilic Acid	
	µmol/l	14.0	11.1	16.9	1.45	2.90		
Calcium	mmol/l	2.07	1.86	2.28	0.105	0.210	Arsenazo III	
	mg/dl	8.30	7.47	9.13	0.415	0.830		
	mmol/l	2.08	1.87	2.29	0.105	0.210	Cresolphthalein complexone	
	mg/dl	8.34	7.51	9.17	0.415	0.830		
Chloride	mmol/l	90.8	83.5	98.1	3.65	7.30	ISE, indirect	
Cholesterol	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall	
	mg/dl	164	143	185	10.5	21.0		
Cholinesterase	U/l	6043	4834	7252	605	1209	Colorimetric - Butyrylthiocholine	
CK, Total	U/l	223	183	263	20.0	40.0	CK-NAC (IFCC)	
Creatinine	mg/dl	1.50	1.20	1.80	0.150	0.300	Alkaline picrate no deproteinisation	
	µmol/l	133	106	160	13.5	27.0		
	mg/dl	1.50	1.20	1.80	0.150	0.300	Creatinine PAP method	
	µmol/l	133	106	160	13.5	27.0		
	mg/dl	1.55	1.24	1.86	0.155	0.310	Enzymatic UV method	
	µmol/l	137	110	164	13.5	27.0		
	gamma-GT	U/l	50	43	57	3.50	7.00	Gamma glut.-3-carb.-4-nitro.
		U/l	50	43	57	3.50	7.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.14	5.22	7.06	0.460	0.920	Glucose oxidase	
	mg/dl	111	94.4	128	8.50	17.0		
HDL-Cholesterol	mmol/l	1.16	0.986	1.33	0.085	0.170	Direct HDL, Clearance method	
	mg/dl	44.8	38.1	51.5	3.35	6.70		
	mmol/l	1.18	1.00	1.36	0.090	0.180	Direct HDL, Immunoseparation	
	mg/dl	45.5	38.7	52.3	3.40	6.80		
Iron	µmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric without ppt.	
	µg/dl	107	87.7	126	9.50	19.0		
LD (LDH)	U/l	377	320	434	28.5	57.0	P to L German methods	
Magnesium	mmol/l	0.927	0.816	1.04	0.057	0.113	Enzymatic	
	mg/dl	2.25	1.98	2.52	0.135	0.270		
	mmol/l	0.911	0.802	1.02	0.055	0.109	Xylidyl Blue	
	mg/dl	2.21	1.94	2.48	0.135	0.270		

IL ILab 600/650/Aries/Taurus			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Phosphate, Inorganic	mmol/l	1.45	1.23	1.67	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.50	3.83	5.17	0.335	0.670	
Potassium	mmol/l	4.02	3.70	4.34	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.9	46.3	69.5	5.80	11.6	Biuret reaction, end point
	g/dl	5.79	4.63	6.95	0.580	1.16	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.0	108	7.55	15.1	
Urea	mmol/l	7.39	6.28	8.50	0.555	1.11	Urease, end point
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	
	mmol/l	7.41	6.30	8.52	0.555	1.11	Urease, kinetic
	mg/dl	44.5	37.8	51.2	3.35	6.70	
	mg/dl (BUN)	20.8	17.7	23.9	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.323	0.281	0.365	0.021	0.042	Uricase perox. no ascorb. ox.
	mg/dl	5.43	4.72	6.14	0.355	0.710	
	mmol/l	0.323	0.281	0.365	0.021	0.042	Uricase Perox. with ascorb. ox
	mg/dl	5.43	4.72	6.14	0.355	0.710	

IL Ilyte		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	96.7	89.0	104	3.65	7.30	ISE, direct
Potassium	mmol/l	3.81	3.51	4.11	0.150	0.300	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

i-SENS i-Smart 30 / i-Smart 30 Pro			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.926	0.833	1.02	0.047	0.094	Ion Selective Electrode
	mg/dl	3.71	3.34	4.08	0.185	0.370	
Chloride	mmol/l	97.4	89.6	105	3.80	7.60	ISE, direct
Potassium	mmol/l	3.90	3.59	4.21	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Jokoh EX-Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	95.9	88.2	104	4.05	8.10	ISE, direct
Potassium	mmol/l	3.72	3.42	4.02	0.150	0.300	ISE method - direct
Sodium	mmol/l	135	128	142	3.50	7.00	ISE method - direct

Labomed Inc. FACA			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
Glucose	mmol/l	5.97	5.07	6.87	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
Triglycerides	mmol/l	1.08	0.907	1.25	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.3	111	7.70	15.4	
Urea	mmol/l	7.28	6.19	8.37	0.545	1.09	Urease, kinetic
	mg/dl	43.8	37.2	50.4	3.30	6.60	
	mg/dl (BUN)	20.4	17.3	23.5	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.348	0.303	0.393	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.85	5.09	6.61	0.380	0.760	
	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.70	4.96	6.44	0.370	0.740	

Medica Easylyte instruments			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.910	0.819	1.00	0.045	0.090	Ion Selective Electrode
	mg/dl	3.65	3.29	4.01	0.180	0.360	
Chloride	mmol/l	95.6	88.0	103	3.70	7.40	ISE, direct
Lithium	mmol/l	0.983	0.865	1.10	0.059	0.117	ISE method - indirect
	mg/dl	0.683	0.601	0.765	0.041	0.082	
Potassium	mmol/l	3.84	3.53	4.15	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Medica EasyStat			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Potassium	mmol/l	3.90	3.59	4.21	0.155	0.310	ISE method - direct

Mediquip ML-200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.891	0.802	0.980	0.045	0.089	Ion Selective Electrode
	mg/dl	3.57	3.21	3.93	0.180	0.360	
Chloride	mmol/l	97.0	89.2	105	4.00	8.00	ISE, direct
Potassium	mmol/l	3.87	3.56	4.18	0.155	0.310	ISE method - direct
Sodium	mmol/l	136	129	143	3.50	7.00	ISE method - direct

Medsource Ozone Csense 100/200CD			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	43.6	37.1	50.1	3.25	6.50	Bromocresol Green
	g/dl	4.36	3.71	5.01	0.325	0.650	
Alkaline Phosphatase	U/l	266	226	306	20.0	40.0	Diethanolamine buffer, DEA
Calcium	mmol/l	2.19	1.97	2.41	0.110	0.220	Arsenazo III
	mg/dl	8.78	7.90	9.66	0.440	0.880	
Glucose	mmol/l	6.48	5.51	7.45	0.485	0.970	Glucose oxidase
	mg/dl	117	99.5	135	9.00	18.0	
Protein, Total	g/l	60.0	48.0	72.0	6.00	12.0	Biuret reaction, end point
	g/dl	6.00	4.80	7.20	0.600	1.20	

Method							
HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)							
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Acid Phos., Total	U/l	11	7	15	2.00	4.00	Naphthyl phos. sub., end point
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.305	0.610	
	g/l	41.1	34.9	47.3	3.10	6.20	Bromocresol Purple
	g/dl	4.11	3.49	4.73	0.310	0.620	
	g/l	40.3	34.3	46.3	3.00	6.00	Nephelometric Assays
	g/dl	4.03	3.43	4.63	0.300	0.600	
	g/l	41.0	34.9	47.1	3.05	6.10	Turbidimetric Assays
	g/dl	4.10	3.49	4.71	0.305	0.610	
Alkaline Phosphatase	U/l	183	156	210	13.5	27.0	AMP non-optimised
	U/l	183	156	210	13.5	27.0	AMP optimised to IFCC
ALT (GPT)	U/l	41	33	49	4.00	8.00	Colorimetric
	U/l	43	34	52	4.50	9.00	Phosphate buffer, DGKC
	U/l	42	34	50	4.00	8.00	Tris buffer with P5P
	U/l	41	33	49	4.00	8.00	Tris buffer with P5P, NVKC
	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	56	48	64	4.00	8.00	Immunoinhibition, EPS substrate
	U/l	61	52	70	4.50	9.00	Randox liquid stable pNPG7
	U/l	55	47	63	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	80	68	92	6.00	12.0	Abbott Alinity Amylase 2
	U/l	81	69	93	6.00	12.0	Abbott Architect Amylase 2
	U/l	81	69	93	6.00	12.0	Abbott Architect/Alinity cal factor 3431
	U/l	83	71	95	6.00	12.0	Abbott Architect/Alinity cal factor 3806
	U/l	81	69	93	6.00	12.0	Abbott blocked pNPG7
	U/l	77	65	89	6.00	12.0	Amylolytic Methods
	U/l	75	64	86	5.50	11.0	Beckman CNPG3 (Extinction Coeff)
	U/l	73	62	84	5.50	11.0	Beckman CNPG3 (Master Cal)
	U/l	81	69	93	6.00	12.0	Beckman Coulter - blocked pNPG7
	U/l	83	71	95	6.00	12.0	Beckman Synchron AMY7
	U/l	81	69	93	6.00	12.0	bioMerieux 2-chloro-pNPG3
	U/l	79	67	91	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	80	68	92	6.00	12.0	Human CNPG3
	U/l	80	68	92	6.00	12.0	Human CNPG3 (IFCC)
	U/l	77	65	89	6.00	12.0	I.L. 2-chloro-pNPG3
	U/l	79	67	91	6.00	12.0	Other Roche 2-chloro-pNPG7
	U/l	81	69	93	6.00	12.0	pNP Maltotrioxide substrates
	U/l	86	73	99	6.50	13.0	Randox Liquid Ethylidene pNPG7
	U/l	83	71	95	6.00	12.0	Randox Lyo. Ethylidene pNPG7
	U/l	79	67	91	6.00	12.0	Roche Integra 2-chloro-pNPG7

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Amylase, Total	U/l	79	67	91	6.00	12.0	Roche liquid stable pNPG7
	U/l	86	73	99	6.50	13.0	Siemens - blocked pNPG7
	U/l	82	70	94	6.00	12.0	Siemens 2-chloro-pNPG3
Apolipoprotein A1	g/l	1.13	0.927	1.33	0.100	0.200	Immunoturbidimetric
	mg/dl	113	92.7	133	10.0	20.0	
Apolipoprotein B	g/l	0.708	0.581	0.835	0.064	0.127	Immunoturbidimetric
	mg/dl	70.8	58.1	83.5	6.35	12.7	
AST (GOT)	U/l	37	30	44	3.50	7.00	Colorimetric
	U/l	38	30	46	4.00	8.00	Phosphate buffer, DGKC
	U/l	36	29	43	3.50	7.00	Tris buffer with P5P, NVKC
	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	14.3	11.3	17.3	1.50	3.00	Enzymatic
	mmol/l	13.7	10.9	16.5	1.40	2.80	PEP Carboxylase
Bile Acids	µmol/l	23.1	18.5	27.7	2.30	4.60	4th Generation Colorimetric
	µmol/l	24.7	19.8	29.6	2.45	4.90	5th Generation Colorimetric
	µmol/l	24.7	19.8	29.6	2.45	4.90	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.15	0.909	1.39	0.120	0.240	Diazo with Dichloroaniline
	µmol/l	19.6	15.5	23.7	2.05	4.10	
	mg/dl	1.16	0.916	1.40	0.120	0.240	Dichlorophenyl Diazonium
	µmol/l	19.9	15.7	24.1	2.10	4.20	
	mg/dl	1.01	0.798	1.22	0.105	0.210	Modified Jendrassik
	µmol/l	17.2	13.6	20.8	1.80	3.60	
	mg/dl	1.10	0.869	1.33	0.115	0.230	Oxidation to Biliverdin/Vanadate
	µmol/l	18.8	14.9	22.7	1.95	3.90	
Bilirubin, Total	mg/dl	1.67	1.32	2.02	0.175	0.350	Dichlorophenyl Diazonium
	µmol/l	28.5	22.5	34.5	3.00	6.00	
	mg/dl	2.09	1.65	2.53	0.220	0.440	Modified Jendrassik
	µmol/l	35.8	28.3	43.3	3.75	7.50	
	mg/dl	1.86	1.47	2.25	0.195	0.390	Oxidation to Biliverdin/Vanadate
µmol/l	31.8	25.1	38.5	3.35	6.70		
Bilirubin, Unconjugated Vitros BU	mg/dl	0.842	0.665	1.02	0.089	0.178	Direct Bilirubin Vitros slide
	µmol/l	14.4	11.4	17.4	1.50	3.00	
Calcium	mmol/l	2.11	1.90	2.32	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.46	7.61	9.31	0.425	0.850	
	mmol/l	2.15	1.94	2.36	0.105	0.210	Ion Selective Electrode
	mg/dl	8.62	7.76	9.48	0.430	0.860	
	mmol/l	2.13	1.92	2.34	0.105	0.210	Methylthymol blue
mg/dl	8.54	7.69	9.39	0.425	0.850		

Method							
HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)							
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	NM-BAPTA
	mg/dl	8.54	7.69	9.39	0.425	0.850	
	mmol/l	2.10	1.89	2.31	0.105	0.210	Phosphonazo
	mg/dl	8.42	7.58	9.26	0.420	0.840	
Calcium, Ionised	mmol/l	0.928	0.835	1.02	0.046	0.092	Ion Selective Electrode
	mg/dl	3.72	3.35	4.09	0.185	0.370	
Chloride	mmol/l	96.9	89.1	105	4.05	8.10	Colorimetric
	mmol/l	95.1	87.5	103	3.95	7.90	ISE, direct
	mmol/l	93.3	85.8	101	3.85	7.70	ISE, indirect
Cholesterol	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Dehydrogenase
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	163	142	184	10.5	21.0	
Cholinesterase	U/l	5605	4484	6726	561	1121	Colorimetric - Benzoylcholine
CK, Total	U/l	213	175	251	19.0	38.0	CK-NAC (IFCC)
	U/l	216	177	255	19.5	39.0	CK-NAC serum start (DGKC)
	U/l	221	181	261	20.0	40.0	CK-NAC substrate start (DGKC)
	U/l	214	175	253	19.5	39.0	Creatine phosphate substrate start
	U/l	229	188	270	20.5	41.0	Monothioglycerol
Copper	µmol/l	18.1	14.5	21.7	1.80	3.60	Atomic absorption
	µg/dl	115	92.0	138	11.5	23.0	
Cortisol	nmol/l	529	397	661	66.0	132	Roche Cobas e402/e801
	µg/dl	19.0	14.3	23.7	2.35	4.70	
Creatinine	mg/dl	1.48	1.18	1.78	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Alkaline picrate with deproteinisation
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Creatinine PAP method
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Enzymatic UV method
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.42	1.14	1.70	0.140	0.280	IDMS traceable
	µmol/l	126	101	151	12.5	25.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate blanked
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	134	107	161	13.5	27.0	

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate blanked comp. (-33umol/l)
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate comp. (-18umol/l)
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.46	1.17	1.75	0.145	0.290	Vitros, DT60/DT60 II/DTSC II
	µmol/l	129	103	155	13.0	26.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Vitros, IDMS traceable
	µmol/l	131	105	157	13.0	26.0	
D-3-Hydroxybutyrate	mmol/l	0.293	0.249	0.337	0.022	0.044	Tris buffer 100mmol pH 8.5
Digoxin	nmol/l	2.07	1.66	2.48	0.205	0.410	Immunoturbidimetric
	ng/ml	1.62	1.30	1.94	0.160	0.320	
Folate	nmol/l	22.2	16.9	27.5	2.65	5.30	Roche Cobas e402/e801
	ng/ml	9.79	7.44	12.1	1.16	2.31	
Free T4	pmol/l	16.0	12.0	20.0	2.00	4.00	Abbott Architect/Alinity
	pg/ml	12.5	9.38	15.6	1.55	3.10	
	ng/dl	1.25	0.938	1.56	0.155	0.310	
	pmol/l	17.1	12.8	21.4	2.15	4.30	Beckman Access/LXi725
	pg/ml	13.3	9.98	16.6	1.65	3.30	
	ng/dl	1.33	0.998	1.66	0.165	0.330	
	pmol/l	16.6	12.5	20.7	2.05	4.10	Beckman Dxl 600/800
	pg/ml	12.9	9.68	16.1	1.60	3.20	
	ng/dl	1.29	0.968	1.61	0.160	0.320	
	pmol/l	19.3	14.5	24.1	2.40	4.80	bioMerieux, VIDAS-FT4N Kit
	pg/ml	15.1	11.3	18.9	1.90	3.80	
	ng/dl	1.51	1.13	1.89	0.190	0.380	
	pmol/l	16.0	12.0	20.0	2.00	4.00	Mindray CL 8000i/6000i/2000i/1200i/1000i
	pg/ml	12.5	9.38	15.6	1.55	3.10	
	ng/dl	1.25	0.938	1.56	0.155	0.310	
	pmol/l	20.5	15.4	25.6	2.55	5.10	Roche Cobas 4000/e411
	pg/ml	16.0	12.0	20.0	2.00	4.00	
	ng/dl	1.60	1.20	2.00	0.200	0.400	
	pmol/l	21.3	16.0	26.6	2.65	5.30	Roche Cobas e402/e801
	pg/ml	16.6	12.5	20.7	2.05	4.10	
	ng/dl	1.66	1.25	2.07	0.205	0.410	
	pmol/l	20.0	15.0	25.0	2.50	5.00	Roche Cobas e601/ 602
	pg/ml	15.6	11.7	19.5	1.95	3.90	
	ng/dl	1.56	1.17	1.95	0.195	0.390	

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	18.1	13.6	22.6	2.25	4.50	Siemens Centaur XP/XPT
	pg/ml	14.1	10.6	17.6	1.75	3.50	
	ng/dl	1.41	1.06	1.76	0.175	0.350	
	pmol/l	18.0	13.5	22.5	2.25	4.50	Siemens Dimension Exl LOCI
	pg/ml	14.0	10.5	17.5	1.75	3.50	
	ng/dl	1.40	1.05	1.75	0.175	0.350	
	pmol/l	20.6	15.5	25.7	2.55	5.10	Siemens/DPC Immulite 1000
	pg/ml	16.1	12.1	20.1	2.00	4.00	
	ng/dl	1.61	1.21	2.01	0.200	0.400	
	pmol/l	20.2	15.2	25.2	2.50	5.00	SNIBE Maglumi analysers
	pg/ml	15.8	11.9	19.7	1.95	3.90	
	ng/dl	1.58	1.19	1.97	0.195	0.390	
pmol/l	21.7	16.3	27.1	2.70	5.40	Tosoh AIA Series	
pg/ml	16.9	12.7	21.1	2.10	4.20		
ng/dl	1.69	1.27	2.11	0.210	0.420		
gamma-GT	U/l	53	45	61	4.00	8.00	DCL, gamma glut.-3-carb.-4-nitro.
	U/l	52	44	60	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	53	45	61	4.00	8.00	Gamma glutamyl-4-nitroanilide
	U/l	54	46	62	4.00	8.00	Randox Gamma glut`3-carb`4-nitro
Gentamicin	µmol/l	7.11	5.69	8.53	0.710	1.42	Gravimetric
	µg/ml	3.40	2.72	4.08	0.340	0.680	
Glucose	mmol/l	6.08	5.17	6.99	0.455	0.910	Glucose dehydrogenase
	mg/dl	110	93.5	127	8.50	17.0	
	mmol/l	6.17	5.24	7.10	0.465	0.930	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
	mmol/l	5.99	5.09	6.89	0.450	0.900	Hexokinase
	mg/dl	108	91.8	124	8.00	16.0	
HBDH	U/l	198	156	240	21.0	42.0	Oxobutyrate < 10 mmol/l
HDL-Cholesterol	mmol/l	1.29	1.10	1.48	0.095	0.190	Direct HDL, Immunoseparation
	mg/dl	49.8	42.3	57.3	3.75	7.50	
	mmol/l	1.32	1.12	1.52	0.100	0.200	Direct HDL, PEGME
	mg/dl	51.0	43.4	58.6	3.80	7.60	
	mmol/l	1.33	1.13	1.53	0.100	0.200	Direct HDL, PPD
	mg/dl	51.3	43.6	59.0	3.85	7.70	
	mmol/l	1.35	1.15	1.55	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	52.1	44.3	59.9	3.90	7.80	
	mmol/l	1.41	1.20	1.62	0.105	0.210	HDL Ultra/Accel Selective Detergent
	mg/dl	54.4	46.2	62.6	4.10	8.20	

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.34	1.14	1.54	0.100	0.200	Vitros dHDL, PTA/MgCl2 direct precip.
	mg/dl	51.7	43.9	59.5	3.90	7.80	
	mmol/l	1.32	1.12	1.52	0.100	0.200	Vitros, Magnetic HDL
	mg/dl	51.0	43.4	58.6	3.80	7.60	
IgA	g/l	2.10	1.58	2.62	0.260	0.520	Turbidimetric (IFCC Cal.)
	mg/dl	210	158	262	26.0	52.0	
IgG	g/l	6.82	5.59	8.05	0.615	1.23	Turbidimetric (IFCC Cal.)
	mg/dl	682	559	805	61.5	123	
IgM	g/l	0.699	0.559	0.839	0.070	0.140	Turbidimetric (IFCC Cal.)
	mg/dl	69.9	55.9	83.9	7.00	14.0	
Iron	µmol/l	18.9	15.5	22.3	1.70	3.40	Colorimetric with ppt.
	µg/dl	106	86.9	125	9.50	19.0	
	µmol/l	18.9	15.5	22.3	1.70	3.40	Colorimetric without ppt.
	µg/dl	106	86.9	125	9.50	19.0	
Lactate	mmol/l	1.52	1.25	1.79	0.135	0.270	Colorimetric - Lactate oxidase
	mg/dl	13.7	11.2	16.2	1.25	2.50	
	mmol/l	1.48	1.21	1.75	0.135	0.270	Enzymatic Electrode
	mg/dl	13.3	10.9	15.7	1.20	2.40	
	mmol/l	1.48	1.21	1.75	0.135	0.270	UV - LDH
	mg/dl	13.3	10.9	15.7	1.20	2.40	
LD (LDH)	U/l	197	167	227	15.0	30.0	L to P IFCC
	U/l	195	166	224	14.5	29.0	Lactate to Pyruvate methods
	U/l	393	334	452	29.5	59.0	P to L German methods
Lipase	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)731/ID 0-100
	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)789/ID 0-052
	U/l	33	26	40	3.50	7.00	Roche Turbidimetric with colipase
Lithium	mmol/l	0.995	0.876	1.11	0.058	0.115	ISE method - indirect
	mg/dl	0.691	0.608	0.774	0.042	0.083	
	mmol/l	1.01	0.889	1.13	0.060	0.120	Spectrophotometric
	mg/dl	0.701	0.617	0.785	0.042	0.084	
Magnesium	mmol/l	0.906	0.797	1.02	0.057	0.114	Arsenazo III
	mg/dl	2.20	1.94	2.46	0.130	0.260	
	mmol/l	0.923	0.812	1.03	0.054	0.107	Atomic absorption
	mg/dl	2.24	1.97	2.51	0.135	0.270	
	mmol/l	0.911	0.802	1.02	0.055	0.109	Calmagite
	mg/dl	2.21	1.94	2.48	0.135	0.270	
mmol/l	0.928	0.817	1.04	0.056	0.112	Chlorphosphonazo III	
mg/dl	2.26	1.99	2.53	0.135	0.270		

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Magnesium	mmol/l	0.909	0.800	1.02	0.056	0.111	Enzymatic
	mg/dl	2.21	1.94	2.48	0.135	0.270	
	mmol/l	0.906	0.797	1.02	0.057	0.114	Methylthymol blue
	mg/dl	2.20	1.94	2.46	0.130	0.260	
	mmol/l	0.922	0.811	1.03	0.054	0.108	Xylidyl Blue
	mg/dl	2.24	1.97	2.51	0.135	0.270	
NEFA	mmol/l	1.38	1.10	1.66	0.140	0.280	Colorimetric
Osmolality	mOsm/kg	286	229	343	28.5	57.0	Calculated
	mOsm/kg	298	238	358	30.0	60.0	Freezing point depression
Paracetamol (Acetamin.)	mmol/l	0.086	0.069	0.103	0.009	0.017	Gravimetric
	mg/l	13.0	10.4	15.6	1.30	2.60	
Phosphate, Inorganic	mmol/l	1.43	1.22	1.64	0.105	0.210	Phosphomolybdate enzymatic
	mg/dl	4.43	3.77	5.09	0.330	0.660	
	mmol/l	1.45	1.23	1.67	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.50	3.83	5.17	0.335	0.670	
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	Colorimetric
	mmol/l	3.92	3.61	4.23	0.155	0.310	Enzymatic
	mmol/l	3.87	3.56	4.18	0.155	0.310	ISE method - direct
	mmol/l	3.94	3.62	4.26	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.7	46.2	69.2	5.75	11.5	Biuret reaction, CX4/5/7
	g/dl	5.77	4.62	6.92	0.575	1.15	
	g/l	58.3	46.6	70.0	5.85	11.7	Biuret reaction, end point
	g/dl	5.83	4.66	7.00	0.585	1.17	
	g/l	58.2	46.6	69.8	5.80	11.6	Biuret reaction, kinetic
	g/dl	5.82	4.66	6.98	0.580	1.16	
PSA, Total	ng/ml	7.77	5.83	9.71	0.970	1.94	Abbott Architect/ Alinity
	ng/ml	11.5	8.63	14.4	1.45	2.90	Beckman Access standardised to Hybritech
	ng/ml	9.68	7.26	12.1	1.21	2.42	bioMerieux VIDAS TPSA
	ng/ml	11.3	8.48	14.1	1.40	2.80	Mindray CL-Series
	ng/ml	10.4	7.80	13.0	1.30	2.60	Roche Cobas 4000/e411
	ng/ml	9.83	7.37	12.3	1.24	2.47	Roche Cobas e402/e801
	ng/ml	10.4	7.80	13.0	1.30	2.60	Roche Cobas e601/602
	ng/ml	8.59	6.44	10.7	1.06	2.11	Siemens Dimension
	ng/ml	8.61	6.46	10.8	1.10	2.19	SNIBE Maglumi analysers
Salicylate	mmol/l	0.434	0.347	0.521	0.044	0.087	Gravimetric
	mg/dl	5.99	4.79	7.19	0.600	1.20	
Sodium	mmol/l	139	132	146	3.50	7.00	Flame photometry

Method							
HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)							
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
Theophylline	µmol/l	28.3	22.6	34.0	2.85	5.70	Gravimetric
	µg/ml	5.10	4.08	6.12	0.510	1.02	
Thyroid Stimulating Hormone (TSH)	µU/ml	1.16	0.928	1.39	0.115	0.230	Abbott Architect/ Alinity
	µU/ml	1.42	1.14	1.70	0.140	0.280	Access/LXi725 Fast TSH 2nd gen.
	µU/ml	1.43	1.14	1.72	0.145	0.290	Access/LXi725 hyper TSH 3rd gen.
	µU/ml	1.75	1.40	2.10	0.175	0.350	AutoBio CLIA
	µU/ml	1.37	1.10	1.64	0.135	0.270	Beckman DXI600/800/ Access 2 (3rd IS)
	µU/ml	1.66	1.33	1.99	0.165	0.330	bioMerieux VIDAS TSH
	µU/ml	1.26	1.01	1.51	0.125	0.250	Fujirebio Lumipulse G Series
	µU/ml	1.82	1.46	2.18	0.180	0.360	Mindray CL 8000i/6000i/2000i/1200i/1000i
	µU/ml	1.68	1.34	2.02	0.170	0.340	Roche Cobas 4000/e411
	µU/ml	1.61	1.29	1.93	0.160	0.320	Roche Cobas e402/e801
	µU/ml	1.69	1.35	2.03	0.170	0.340	Roche Cobas e601/ 602
	µU/ml	1.67	1.34	2.00	0.165	0.330	Roche Elecsys
	µU/ml	1.35	1.08	1.62	0.135	0.270	Siemens Dimension Exl LOCI
	µU/ml	1.69	1.35	2.03	0.170	0.340	Siemens/DPC Immulite 1000
	µU/ml	1.51	1.21	1.81	0.150	0.300	SNIBE Maglumi analysers
	µU/ml	1.48	1.18	1.78	0.150	0.300	Tosoh AIA Series
TIBC	µmol/l	42.3	33.4	51.2	4.45	8.90	Calculated from Transferrin
	µg/dl	236	186	286	25.0	50.0	
	µmol/l	44.2	34.9	53.5	4.65	9.30	Direct Colorimetric
	µg/dl	247	195	299	26.0	52.0	
	µmol/l	42.3	33.4	51.2	4.45	8.90	FE+UIBC(saturation with iron)
	µg/dl	236	186	286	25.0	50.0	
	µmol/l	49.6	39.2	60.0	5.20	10.4	Randox Colorimetric
	µg/dl	277	219	335	29.0	58.0	
	µmol/l	50.8	40.1	61.5	5.35	10.7	Randox Direct Colorimetric
	µg/dl	284	224	344	30.0	60.0	
Tobramycin	µmol/l	6.30	5.04	7.56	0.630	1.26	Gravimetric
	µg/ml	2.95	2.36	3.54	0.295	0.590	
Total T3	nmol/l	1.87	1.40	2.34	0.235	0.470	Abbott Architect/ Alinity
	ng/ml	1.22	0.915	1.53	0.155	0.310	
	ng/dl	122	91.5	153	15.5	31.0	

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total T3	nmol/l	2.18	1.64	2.72	0.270	0.540	Beckman Access/LXi725
	ng/ml	1.42	1.07	1.77	0.175	0.350	
	ng/dl	142	107	177	17.5	35.0	
	nmol/l	2.01	1.51	2.51	0.250	0.500	bioMerieux, VIDAS
	ng/ml	1.31	0.983	1.64	0.165	0.330	
	ng/dl	131	98.3	164	16.5	33.0	
	nmol/l	2.43	1.82	3.04	0.305	0.610	Roche Cobas 4000/e411
	ng/ml	1.58	1.19	1.97	0.195	0.390	
	ng/dl	158	119	197	19.5	39.0	
	nmol/l	2.48	1.86	3.10	0.310	0.620	Roche Cobas e402/e801
	ng/ml	1.61	1.21	2.01	0.200	0.400	
	ng/dl	161	121	201	20.0	40.0	
	nmol/l	2.37	1.78	2.96	0.295	0.590	Roche Cobas e601/602
	ng/ml	1.54	1.16	1.92	0.190	0.380	
	ng/dl	154	116	192	19.0	38.0	
	nmol/l	2.33	1.75	2.91	0.290	0.580	Siemens Centaur XP/XPT
	ng/ml	1.52	1.14	1.90	0.190	0.380	
	ng/dl	152	114	190	19.0	38.0	
Total T4	nmol/l	86.8	65.1	109	11.1	22.2	Abbott Architect/ Alinity
	ng/ml	67.7	50.8	84.6	8.45	16.9	
	µg/dl	6.77	5.08	8.46	0.845	1.69	
	nmol/l	97.2	72.9	122	12.4	24.8	Beckman Access/LXi725
	ng/ml	75.8	56.9	94.7	9.45	18.9	
	µg/dl	7.58	5.69	9.47	0.945	1.89	
	nmol/l	86.5	64.9	108	10.8	21.5	bioMerieux, VIDAS
	ng/ml	67.5	50.6	84.4	8.45	16.9	
	µg/dl	6.75	5.06	8.44	0.845	1.69	
	nmol/l	93.0	69.8	116	11.5	23.0	Roche Cobas 4000/e411
	ng/ml	72.5	54.4	90.6	9.05	18.1	
	µg/dl	7.25	5.44	9.06	0.905	1.81	
	nmol/l	89.2	66.9	112	11.4	22.8	Roche Cobas e402/e801
	ng/ml	69.6	52.2	87.0	8.70	17.4	
	µg/dl	6.96	5.22	8.70	0.870	1.74	
	nmol/l	89.0	66.8	111	11.0	22.0	Roche Cobas e601/ 602
	ng/ml	69.4	52.1	86.7	8.65	17.3	
	µg/dl	6.94	5.21	8.67	0.865	1.73	
nmol/l	98.9	74.2	124	12.6	25.1	Thermo Scientific / Microgenics DRI	
ng/ml	77.1	57.8	96.4	9.65	19.3		
µg/dl	7.71	5.78	9.64	0.965	1.93		

Method		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Transferrin	g/l	1.94	1.55	2.33	0.195	0.390	Turbidimetric (IFCC Cal.)
	mg/dl	194	155	233	19.5	39.0	
Triglycerides	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/Glycerol Dehydrogenase
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction	
mg/dl	91.2	76.6	106	7.40	14.8		
Urea	mmol/l	7.24	6.15	8.33	0.545	1.09	Urease, end point
	mg/dl	43.5	37.0	50.0	3.25	6.50	
	mg/dl (BUN)	20.3	17.3	23.3	1.50	3.00	
	mmol/l	7.18	6.10	8.26	0.540	1.08	Urease, hypochlorite
	mg/dl	43.2	36.7	49.7	3.25	6.50	
	mg/dl (BUN)	20.1	17.1	23.1	1.50	3.00	
	mmol/l	7.18	6.10	8.26	0.540	1.08	Urease, kinetic
	mg/dl	43.2	36.7	49.7	3.25	6.50	
mg/dl (BUN)	20.1	17.1	23.1	1.50	3.00		
Uric Acid (Urate)	mmol/l	0.347	0.302	0.392	0.023	0.045	Reduction methods
	mg/dl	5.83	5.07	6.59	0.380	0.760	
	mmol/l	0.341	0.297	0.385	0.022	0.044	Uricase @ 293 nm
	mg/dl	5.73	4.99	6.47	0.370	0.740	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.71	4.97	6.45	0.370	0.740	
	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.70	4.96	6.44	0.370	0.740	
mmol/l	0.337	0.293	0.381	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm	
mg/dl	5.66	4.92	6.40	0.370	0.740		
mmol/l	0.343	0.298	0.388	0.023	0.045	Uricase, catalase 340nm.	
mg/dl	5.76	5.01	6.51	0.375	0.750		
Vitamin B12	pmol/l	458	366	550	46.0	92.0	Roche Cobas e402/e801
	pg/ml	621	497	745	62.0	124	

Mindray BA-88A			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.1	33.2	45.0	2.95	5.90	Bromocresol Green
	g/dl	3.91	3.32	4.50	0.295	0.590	
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.18	3.64	4.72	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Creatinine	mg/dl	1.45	1.16	1.74	0.145	0.290	Alkaline picrate no deproteinisation
	μmol/l	128	102	154	13.0	26.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Alkaline picrate with deproteinisation
	μmol/l	128	102	154	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Jaffe rate blanked
	μmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	57	48	66	4.50	9.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.12	5.20	7.04	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
Protein, Total	g/l	59.6	47.7	71.5	5.95	11.9	Biuret reaction, end point
	g/dl	5.96	4.77	7.15	0.595	1.19	
Triglycerides	mmol/l	1.10	0.924	1.28	0.090	0.180	Lipase/GPO-PAP no correction
	mg/dl	97.4	81.8	113	7.80	15.6	
Urea	mmol/l	7.46	6.34	8.58	0.560	1.12	Urease, kinetic
	mg/dl	44.8	38.1	51.5	3.35	6.70	
	mg/dl	20.9	17.8	24.0	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.361	0.314	0.408	0.024	0.047	Uricase perox. no ascorb. ox.
	mg/dl	6.06	5.27	6.85	0.395	0.790	
	mmol/l	0.368	0.320	0.416	0.024	0.048	Uricase Perox. with ascorb. ox
	mg/dl	6.18	5.38	6.98	0.400	0.800	

Mindray BS Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.300	0.600	
Alkaline Phosphatase	U/l	243	207	279	18.0	36.0	Agappe - DGKC-SCE
	U/l	191	162	220	14.5	29.0	AMP optimised to IFCC
	U/l	243	207	279	18.0	36.0	Diethanolamine buffer, DEA
ALT (GPT)	U/l	43	34	52	4.50	9.00	Colorimetric
	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	81	69	93	6.00	12.0	Amylolytic Methods
Amylase, Total	U/l	82	70	94	6.00	12.0	Amylolytic Methods
	U/l	82	70	94	6.00	12.0	Human CNPG3 (IFCC)
	U/l	86	73	99	6.50	13.0	pNP Maltotriose substrates
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Bicarbonate	mmol/l	14.4	11.4	17.4	1.50	3.00	Enzymatic
	mmol/l	15.2	12.1	18.3	1.55	3.10	PEP Carboxylase
Bilirubin, Direct	mg/dl	1.02	0.806	1.23	0.105	0.210	Oxidation to Biliverdin/Vanadate
	µmol/l	17.4	13.7	21.1	1.85	3.70	
Bilirubin, Total	mg/dl	1.71	1.35	2.07	0.180	0.360	Oxidation to Biliverdin/Vanadate
	µmol/l	29.2	23.1	35.3	3.05	6.10	
Calcium	mmol/l	2.17	1.95	2.39	0.110	0.220	Arsenazo III
	mg/dl	8.70	7.83	9.57	0.435	0.870	
	mmol/l	2.25	2.03	2.47	0.110	0.220	Cresolphthalein complexone
	mg/dl	9.02	8.12	9.92	0.450	0.900	
Chloride	mmol/l	94.7	87.1	102	3.65	7.30	ISE, indirect
Cholesterol	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Dehydrogenase
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.18	3.64	4.72	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
	mmol/l	4.20	3.65	4.75	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	162	141	183	10.5	21.0	
Cholinesterase	U/l	5869	4695	7043	587	1174	Colorimetric - Butyrylthiocholine
CK, Total	U/l	220	180	260	20.0	40.0	CK-NAC (IFCC)
	U/l	230	189	271	20.5	41.0	CK-NAC substrate start (DGKC)
	U/l	222	182	262	20.0	40.0	Creatine phosphate substrate start
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Alkaline picrate with deproteinisation
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Creatinine PAP method
	µmol/l	130	104	156	13.0	26.0	

Mindray BS Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Enzymatic UV method
	μmol/l	132	106	158	13.0	26.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Jaffe rate blanked
	μmol/l	133	106	160	13.5	27.0	
gamma-GT	U/l	53	45	61	4.00	8.00	DCL, gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	55	47	63	4.00	8.00	Gamma glutamyl-4-nitroanilide
Glucose	mmol/l	5.96	5.07	6.85	0.445	0.890	Glucose dehydrogenase
	mg/dl	107	91.0	123	8.00	16.0	
	mmol/l	6.10	5.19	7.01	0.455	0.910	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
	mmol/l	6.08	5.17	6.99	0.455	0.910	Hexokinase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.28	1.09	1.47	0.095	0.190	Direct HDL, Clearance method
	mg/dl	49.4	42.0	56.8	3.70	7.40	
	mmol/l	1.36	1.16	1.56	0.100	0.200	Direct HDL, Immunoseparation
	mg/dl	52.5	44.6	60.4	3.95	7.90	
	mmol/l	1.30	1.11	1.49	0.095	0.190	Direct HDL, PEGME
	mg/dl	50.2	42.7	57.7	3.75	7.50	
	mmol/l	1.32	1.12	1.52	0.100	0.200	Direct HDL, PPD
	mg/dl	51.0	43.4	58.6	3.80	7.60	
Iron	μmol/l	18.6	15.3	21.9	1.65	3.30	Colorimetric with ppt.
	μg/dl	104	85.3	123	9.50	19.0	
	μmol/l	18.7	15.3	22.1	1.70	3.40	Colorimetric without ppt.
	μg/dl	105	86.1	124	9.50	19.0	
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC
	U/l	200	170	230	15.0	30.0	Lactate to Pyruvate methods
	U/l	398	338	458	30.0	60.0	P to L German methods
Magnesium	mmol/l	0.959	0.844	1.07	0.056	0.111	Enzymatic
	mg/dl	2.33	2.05	2.61	0.140	0.280	
	mmol/l	0.966	0.850	1.08	0.057	0.114	Methylthymol blue
	mg/dl	2.35	2.07	2.63	0.140	0.280	
	mmol/l	0.955	0.840	1.07	0.058	0.115	Xylidyl Blue
	mg/dl	2.32	2.04	2.60	0.140	0.280	
Phosphate, Inorganic	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.46	3.79	5.13	0.335	0.670	
	mmol/l	1.46	1.24	1.68	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.53	3.85	5.21	0.340	0.680	

Mindray BS Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Potassium	mmol/l	4.01	3.69	4.33	0.160	0.320	ISE method - indirect
Protein, Total	g/l	59.3	47.4	71.2	5.95	11.9	Biuret reaction, end point
	g/dl	5.93	4.74	7.12	0.595	1.19	
	g/l	59.9	47.9	71.9	6.00	12.0	Biuret reaction, kinetic
	g/dl	5.99	4.79	7.19	0.600	1.20	
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/Glycerol Dehydrogenase
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.39	6.28	8.50	0.555	1.11	Urease, end point
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	
	mmol/l	7.43	6.32	8.54	0.555	1.11	Urease, hypochlorite
	mg/dl	44.7	38.0	51.4	3.35	6.70	
	mg/dl (BUN)	20.8	17.7	23.9	1.55	3.10	
	mmol/l	7.34	6.24	8.44	0.550	1.10	Urease, kinetic
	mg/dl	44.1	37.5	50.7	3.30	6.60	
	mg/dl (BUN)	20.6	17.5	23.7	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.71	4.97	6.45	0.370	0.740	
	mmol/l	0.336	0.292	0.380	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.64	4.91	6.37	0.365	0.730	
	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.61	4.88	6.34	0.365	0.730	

Mindray CL-Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	16.0	12.0	20.0	2.00	4.00	Mindray CL 8000i/6000i/2000i/1200i/1000i
	pg/ml	12.5	9.38	15.6	1.55	3.10	
	ng/dl	1.25	0.938	1.56	0.155	0.310	
PSA, Total	ng/ml	11.3	8.48	14.1	1.40	2.80	Mindray CL-Series
Thyroid Stimulating Hormone (TSH)	μU/ml	1.81	1.45	2.17	0.180	0.360	Mindray CL 8000i/6000i/2000i/1200i/1000i
Total T4	nmol/l	89.8	67.4	112	11.1	22.2	Mindray CL-Series
	ng/ml	70.0	52.5	87.5	8.75	17.5	
	μg/dl	7.00	5.25	8.75	0.875	1.75	

Mindray Series (Archem Reagent)			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P
Protein, Total	g/l	62.6	50.1	75.1	6.25	12.5	Biuret reaction, end point
	g/dl	6.26	5.01	7.51	0.625	1.25	

MTI Diagnostics Auto ISE			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Ion Selective Electrode
	mg/dl	8.74	7.87	9.61	0.435	0.870	
Chloride	mmol/l	97.4	89.6	105	3.80	7.60	ISE, direct
Potassium	mmol/l	3.75	3.45	4.05	0.150	0.300	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

MTI Diagnostics M Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.5	34.4	46.6	3.05	6.10	Bromocresol Green
	g/dl	4.05	3.44	4.66	0.305	0.610	
ALT (GPT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.15	3.61	4.69	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	139	181	10.5	21.0	
	mmol/l	4.03	3.51	4.55	0.260	0.520	Cholesterol Oxidase - IDMS
	mg/dl	156	136	176	10.0	20.0	
Creatinine	mg/dl	1.44	1.15	1.73	0.145	0.290	Jaffe rate blanked
	µmol/l	127	102	152	12.5	25.0	
Glucose	mmol/l	6.19	5.26	7.12	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
Protein, Total	g/l	56.5	45.2	67.8	5.65	11.3	Biuret reaction, end point
	g/dl	5.65	4.52	6.78	0.565	1.13	
Triglycerides	mmol/l	0.997	0.837	1.16	0.082	0.163	Lipase/GPO-PAP no correction
	mg/dl	88.2	74.1	102	6.90	13.8	
Urea	mmol/l	7.00	5.95	8.05	0.525	1.05	Urease, kinetic
	mg/dl	42.1	35.8	48.4	3.15	6.30	
	mg/dl	19.6	16.7	22.5	1.45	2.90	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.71	4.97	6.45	0.370	0.740	

Nova Stat Profile Prime Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	97.4	89.6	105	3.80	7.60	ISE, direct
Potassium	mmol/l	4.01	3.69	4.33	0.160	0.320	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Nulife NU-LYTE Electrolyte Analyzer				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	96.5	88.8	104	3.75	7.50	ISE, direct
Potassium	mmol/l	3.70	3.40	4.00	0.150	0.300	ISE method - direct
Sodium	mmol/l	134	127	141	3.50	7.00	ISE method - direct

Ortho VITROS			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.7	34.6	46.8	3.05	6.10	Ortho Vitros MicroSlide Systems
	g/dl	4.07	3.46	4.68	0.305	0.610	
Alkaline Phosphatase	U/l	163	139	187	12.0	24.0	Ortho Vitros MicroSlide Systems
ALT (GPT)	U/l	46	37	55	4.50	9.00	Ortho Vitros MicroSlide Systems
	U/l	46	37	55	4.50	9.00	Ortho Vitros MicroSlide visible
Amylase, Total	U/l	64	54	74	5.00	10.0	Ortho Vitros MicroSlide Systems
AST (GOT)	U/l	54	43	65	5.50	11.0	Ortho Vitros MicroSlide visible
Bilirubin, Total	mg/dl	1.69	1.34	2.04	0.175	0.350	Ortho Vitros MicroSlide Total Bil
	µmol/l	28.9	22.8	35.0	3.05	6.10	
Calcium	mmol/l	2.11	1.90	2.32	0.105	0.210	Ortho Vitros MicroSlide Systems
	mg/dl	8.46	7.61	9.31	0.425	0.850	
Chloride	mmol/l	95.1	87.5	103	3.95	7.90	Ortho Vitros MicroSlide Systems
Cholesterol	mmol/l	4.26	3.71	4.81	0.275	0.550	Ortho Vitros MicroSlide Systems
	mg/dl	164	143	185	10.5	21.0	
Cholinesterase	U/l	5726	4581	6871	573	1145	Ortho Vitros MicroSlide Systems
CK, Total	U/l	205	168	242	18.5	37.0	Ortho Vitros MicroSlide Systems
Free T4	pmol/l	31.4	23.6	39.2	3.90	7.80	Ortho Vitros 3600/5600/ECi/XT/7600
	pg/ml	24.5	18.4	30.6	3.05	6.10	
	ng/dl	2.45	1.84	3.06	0.305	0.610	
gamma-GT	U/l	63	54	72	4.50	9.00	Ortho Vitros MicroSlide Systems
Glucose	mmol/l	6.01	5.11	6.91	0.450	0.900	Ortho Vitros MicroSlide Systems
	mg/dl	108	91.8	124	8.00	16.0	
Iron	µmol/l	19.8	16.2	23.4	1.80	3.60	Ortho Vitros MicroSlide Systems
	µg/dl	111	91.0	131	10.0	20.0	
Lactate	mmol/l	1.45	1.19	1.71	0.130	0.260	Ortho Vitros MicroSlide Systems
	mg/dl	13.1	10.7	15.5	1.20	2.40	
LD (LDH)	U/l	218	185	251	16.5	33.0	Ortho Vitros IFCC Traceable
	U/l	218	185	251	16.5	33.0	Ortho Vitros MicroSlide Systems
Lipase	U/l	205	164	246	20.5	41.0	Ortho Vitros MicroSlide Systems
Lithium	mmol/l	1.19	1.05	1.33	0.070	0.140	Ortho Vitros MicroSlide Systems
	mg/dl	0.826	0.727	0.925	0.050	0.099	
Magnesium	mmol/l	0.914	0.804	1.02	0.053	0.106	Ortho Vitros MicroSlide Systems
	mg/dl	2.22	1.95	2.49	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.49	1.27	1.71	0.110	0.220	Ortho Vitros MicroSlide Systems
	mg/dl	4.62	3.93	5.31	0.345	0.690	
Potassium	mmol/l	3.95	3.63	4.27	0.160	0.320	Ortho Vitros MicroSlide Systems
Protein, Total	g/l	59.5	47.6	71.4	5.95	11.9	Ortho Vitros MicroSlide Systems
	g/dl	5.95	4.76	7.14	0.595	1.19	

Ortho VITROS			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
PSA, Total	ng/ml	9.33	7.00	11.7	1.19	2.37	Ortho Vitros 3600/5600/ECi
	ng/ml	9.79	7.34	12.2	1.21	2.41	Ortho Vitros 3600/5600/ECi PSA II/XT7600
Sodium	mmol/l	139	132	146	3.50	7.00	Ortho Vitros MicroSlide Systems
Thyroid Stimulating Hormone (TSH)	µU/ml	1.45	1.16	1.74	0.145	0.290	Ortho Vitros 3600/5600/ECi/XT 7600
	µU/ml	1.47	1.18	1.76	0.145	0.290	Ortho Vitros TSH3
TIBC	µmol/l	47.8	37.8	57.8	5.00	10.0	Ortho Vitros MicroSlide Systems
	µg/dl	267	211	323	28.0	56.0	
	µmol/l	47.2	37.3	57.1	4.95	9.90	Ortho Vitros Microtip
	µg/dl	264	209	319	27.5	55.0	
Total T3	nmol/l	2.69	2.02	3.36	0.335	0.670	Ortho Vitros 3600/5600/ECi/XT/7600
	ng/ml	1.75	1.31	2.19	0.220	0.440	
	ng/dl	175	131	219	22.0	44.0	
Total T4	nmol/l	86.2	64.7	108	10.9	21.8	Ortho Vitros 3600/5600/ECi/XT 7600
	ng/ml	67.2	50.4	84.0	8.40	16.8	
	µg/dl	6.72	5.04	8.40	0.840	1.68	
Triglycerides	mmol/l	1.24	1.04	1.44	0.100	0.200	Ortho Vitros MicroSlide Systems
	mg/dl	110	92.4	128	9.00	18.0	
Urea	mmol/l	6.85	5.82	7.88	0.515	1.03	Ortho Vitros MicroSlide Systems
	mg/dl	41.2	35.0	47.4	3.10	6.20	
	mg/dl (BUN)	19.2	16.3	22.1	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.328	0.285	0.371	0.022	0.043	Ortho Vitros MicroSlide Systems
	mg/dl	5.51	4.79	6.23	0.360	0.720	



Osmometer - Freezing Point Dep.			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/ kg	299	239	359	30.0	60.0	Freezing point depression

Paramedical PKL PPC Automatic Series

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.6	33.7	45.5	2.95	5.90	Bromocresol Green
	g/dl	3.96	3.37	4.55	0.295	0.590	
Calcium	mmol/l	2.18	1.96	2.40	0.110	0.220	Arsenazo III
	mg/dl	8.74	7.87	9.61	0.435	0.870	
Cholesterol	mmol/l	4.29	3.73	4.85	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	166	144	188	11.0	22.0	
	mmol/l	4.15	3.61	4.69	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	160	139	181	10.5	21.0	
gamma-GT	U/l	57	48	66	4.50	9.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.16	5.24	7.08	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
Protein, Total	g/l	58.6	46.9	70.3	5.85	11.7	Biuret reaction, end point
	g/dl	5.86	4.69	7.03	0.585	1.17	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Uric Acid (Urate)	mmol/l	0.336	0.292	0.380	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.64	4.91	6.37	0.365	0.730	

Radiometer ABL 80 instruments			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.840	0.756	0.924	0.042	0.084	Ion Selective Electrode
	mg/dl	3.37	3.03	3.71	0.170	0.340	
Chloride	mmol/l	97.0	89.2	105	4.00	8.00	ISE, direct
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Radiometer ABL 800 series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.917	0.825	1.01	0.047	0.093	Ion Selective Electrode
	mg/dl	3.68	3.31	4.05	0.185	0.370	
Chloride	mmol/l	96.7	89.0	104	3.65	7.30	ISE, direct
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

Randox RX Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.305	0.610	
Alkaline Phosphatase	U/l	193	164	222	14.5	29.0	AMP optimised to IFCC
	U/l	298	253	343	22.5	45.0	Diethanolamine buffer, DEA
ALT (GPT)	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	77	65	89	6.00	12.0	Randox liquid stable pNPG7
Amylase, Total	U/l	99	84	114	7.50	15.0	Randox Liquid Ethylidene pNPG7
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Bile Acids	µmol/l	24.7	19.8	29.6	2.45	4.90	5th Generation Colorimetric
Bilirubin, Direct	mg/dl	1.02	0.806	1.23	0.105	0.210	Oxidation to Biliverdin/Vanadate
	µmol/l	17.5	13.8	21.2	1.85	3.70	
Bilirubin, Total	mg/dl	1.75	1.38	2.12	0.185	0.370	Oxidation to Biliverdin/Vanadate
	µmol/l	29.9	23.6	36.2	3.15	6.30	
Calcium	mmol/l	2.20	1.98	2.42	0.110	0.220	Arsenazo III
	mg/dl	8.82	7.94	9.70	0.440	0.880	
Chloride	mmol/l	92.9	85.5	100	3.55	7.10	ISE, direct
Cholesterol	mmol/l	4.50	3.92	5.08	0.290	0.580	Cholesterol Oxidase - Abell Kendall
	mg/dl	174	151	197	11.5	23.0	
CK, Total	U/l	241	198	284	21.5	43.0	CK-NAC (IFCC)
	U/l	227	186	268	20.5	41.0	CK-NAC substrate start (DGKC)
Creatinine	mg/dl	1.44	1.15	1.73	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	127	102	152	12.5	25.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Enzymatic UV method
	µmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.37	5.41	7.33	0.480	0.960	Glucose oxidase
	mg/dl	115	97.8	132	8.50	17.0	
	mmol/l	6.04	5.13	6.95	0.455	0.910	Hexokinase
	mg/dl	109	92.7	125	8.00	16.0	
Iron	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	µg/dl	112	91.8	132	10.0	20.0	
Lactate	mmol/l	1.60	1.31	1.89	0.145	0.290	Colorimetric - Lactate oxidase
	mg/dl	14.4	11.8	17.0	1.30	2.60	
LD (LDH)	U/l	182	155	209	13.5	27.0	L to P IFCC
	U/l	404	343	465	30.5	61.0	P to L German methods
Lipase	U/l	42	34	50	4.00	8.00	Colorimetric Randox
Magnesium	mmol/l	0.939	0.826	1.05	0.056	0.111	Xylidyl Blue
	mg/dl	2.28	2.01	2.55	0.135	0.270	

Randox RX Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Phosphate, Inorganic	mmol/l	1.45	1.23	1.67	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.50	3.83	5.17	0.335	0.670	
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	ISE method - direct
Protein, Total	g/l	59.4	47.5	71.3	5.95	11.9	Biuret reaction, end point
	g/dl	5.94	4.75	7.13	0.595	1.19	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
TIBC	μmol/l	50.8	40.1	61.5	5.35	10.7	Direct Colorimetric
	μg/dl	284	224	344	30.0	60.0	
Triglycerides	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.0	108	7.55	15.1	
Urea	mmol/l	6.95	5.91	7.99	0.520	1.04	Urease, kinetic
	mg/dl	41.8	35.5	48.1	3.15	6.30	
	mg/dl (BUN)	19.5	16.6	22.4	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.352	0.306	0.398	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	5.91	5.14	6.68	0.385	0.770	
	mmol/l	0.343	0.298	0.388	0.023	0.045	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.76	5.01	6.51	0.375	0.750	

Rayto Chemray Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
AST (GOT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
Cholesterol	mmol/l	4.09	3.56	4.62	0.265	0.530	Cholesterol Oxidase - Abell Kendall
	mg/dl	158	137	179	10.5	21.0	
Creatinine	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked
	μmol/l	128	102	154	13.0	26.0	
gamma-GT	U/l	56	48	64	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.48	5.51	7.45	0.485	0.970	Glucose oxidase
	mg/dl	117	99.5	135	9.00	18.0	
Triglycerides	mmol/l	1.08	0.907	1.25	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.3	111	7.70	15.4	

Rayto RT Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Glucose	mmol/l	6.11	5.19	7.03	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	

Robonik Prietest			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.51	1.21	1.81	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	134	107	161	13.5	27.0	
Glucose	mmol/l	6.29	5.35	7.23	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
Urea	mmol/l	7.19	6.11	8.27	0.540	1.08	Urease, kinetic
	mg/dl	43.2	36.7	49.7	3.25	6.50	
	mg/dl (BUN)	20.1	17.1	23.1	1.50	3.00	

Roche Accu-Chek			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Glucose	mmol/l	6.24	5.30	7.18	0.470	0.940	Glucose dehydrogenase
	mg/dl	112	95.2	129	8.50	17.0	

Roche AVL 9100 series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.962	0.866	1.06	0.049	0.098	Ion Selective Electrode
	mg/dl	3.86	3.47	4.25	0.195	0.390	
Chloride	mmol/l	94.4	86.8	102	3.80	7.60	ISE, direct
Lithium	mmol/l	0.999	0.879	1.12	0.061	0.121	ISE method - indirect
	mg/dl	0.694	0.611	0.777	0.042	0.083	
Potassium	mmol/l	3.92	3.61	4.23	0.155	0.310	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

Roche AVL OMNI C/b121			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	93.7	86.2	101	3.65	7.30	ISE, direct
Potassium	mmol/l	3.81	3.51	4.11	0.150	0.300	ISE method - direct
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - direct

Roche AVL OMNI S/b221			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.885	0.797	0.973	0.044	0.088	Ion Selective Electrode
	mg/dl	3.55	3.20	3.90	0.175	0.350	
Chloride	mmol/l	94.3	86.8	102	3.85	7.70	ISE, direct
Potassium	mmol/l	3.81	3.51	4.11	0.150	0.300	ISE method - direct
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct

Roche Cobas c111			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Albumin	g/l	42.2	35.9	48.5	3.15	6.30	Bromocresol Green	
	g/dl	4.22	3.59	4.85	0.315	0.630		
Alkaline Phosphatase	U/l	166	141	191	12.5	25.0	AMP optimised to IFCC	
	U/l	171	145	197	13.0	26.0	Roche AMP buffer IFCC	
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P	
Amylase, Total	U/l	80	68	92	6.00	12.0	Roche liquid stable pNPG7	
AST (GOT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P	
Bilirubin, Direct	mg/dl	1.18	0.932	1.43	0.125	0.250	Diazo with Dichloroaniline	
	µmol/l	20.2	16.0	24.4	2.10	4.20		
	mg/dl	1.19	0.940	1.44	0.125	0.250	Diazo with Sulphanilic Acid	
	µmol/l	20.3	16.0	24.6	2.15	4.30		
	mg/dl	1.20	0.948	1.45	0.125	0.250	Dichlorophenyl Diazonium	
	µmol/l	20.5	16.2	24.8	2.15	4.30		
	mg/dl	1.23	0.972	1.49	0.130	0.260	Roche DPD Doumas standardised	
	µmol/l	21.0	16.6	25.4	2.20	4.40		
	mg/dl	1.19	0.940	1.44	0.125	0.250	Roche DPD JG standardised	
	µmol/l	20.4	16.1	24.7	2.15	4.30		
	Bilirubin, Total	mg/dl	1.66	1.31	2.01	0.175	0.350	Dichlorophenyl Diazonium
		µmol/l	28.4	22.4	34.4	3.00	6.00	
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	Arsenazo III	
	mg/dl	8.54	7.69	9.39	0.425	0.850		
	mmol/l	2.12	1.91	2.33	0.105	0.210	Cresolphthalein complexone	
	mg/dl	8.50	7.65	9.35	0.425	0.850		
	mmol/l	2.11	1.90	2.32	0.105	0.210	NM-BAPTA	
	mg/dl	8.46	7.61	9.31	0.425	0.850		
Chloride	mmol/l	96.1	88.4	104	3.95	7.90	ISE, indirect	
Cholesterol	mmol/l	4.09	3.56	4.62	0.265	0.530	Cholesterol Oxidase - Abell Kendall	
	mg/dl	158	137	179	10.5	21.0		
	mmol/l	4.10	3.57	4.63	0.265	0.530	Cholesterol Oxidase - IDMS	
	mg/dl	158	137	179	10.5	21.0		
CK, Total	U/l	209	171	247	19.0	38.0	CK-NAC (IFCC)	
	U/l	192	157	227	17.5	35.0	Creatine phosphate substrate start	
Creatinine	mg/dl	1.38	1.10	1.66	0.140	0.280	Alkaline picrate no deproteinisation	
	µmol/l	122	97.6	146	12.0	24.0		
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked	
	µmol/l	128	102	154	13.0	26.0		
	mg/dl	1.42	1.14	1.70	0.140	0.280	Jaffe rate blanked comp. (-26µmol/l)	
	µmol/l	126	101	151	12.5	25.0		

Roche Cobas c111			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate comp. (-18umol/l)
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	Roche Creatinine Plus
	µmol/l	132	106	158	13.0	26.0	
gamma-GT	U/l	50	43	57	3.50	7.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	43	37	49	3.00	6.00	Gamma glutamyl-4-nitroanilide
Glucose	mmol/l	6.16	5.24	7.08	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
	mmol/l	6.11	5.19	7.03	0.460	0.920	Hexokinase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.30	1.11	1.49	0.095	0.190	Direct HDL, Roche 4th gen.
	mg/dl	50.2	42.7	57.7	3.75	7.50	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric without ppt.
	µg/dl	107	87.7	126	9.50	19.0	
LD (LDH)	U/l	204	173	235	15.5	31.0	L to P IFCC
Lipase	U/l	32	26	38	3.00	6.00	Colorimetric Roche ACN(8)789/ID 0-052
Magnesium	mmol/l	0.922	0.811	1.03	0.054	0.108	Chlorphosphonazo III
	mg/dl	2.24	1.97	2.51	0.135	0.270	
	mmol/l	0.924	0.813	1.04	0.058	0.116	Xylidyl Blue
	mg/dl	2.25	1.98	2.52	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.42	1.21	1.63	0.105	0.210	Phosphomolybdate enzymatic
	mg/dl	4.40	3.74	5.06	0.330	0.660	
	mmol/l	1.47	1.25	1.69	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.56	3.88	5.24	0.340	0.680	
Potassium	mmol/l	3.94	3.62	4.26	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.8	46.2	69.4	5.80	11.6	Biuret reaction, end point
	g/dl	5.78	4.62	6.94	0.580	1.16	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	93.8	78.8	109	7.60	15.2	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	91.2	76.6	106	7.40	14.8	

Roche Cobas c111			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	6.97	5.92	8.02	0.525	1.05	Urease, end point
	mg/dl	41.9	35.6	48.2	3.15	6.30	
	mg/dl (BUN)	19.5	16.6	22.4	1.45	2.90	
	mmol/l	6.86	5.83	7.89	0.515	1.03	Urease, kinetic
	mg/dl	41.2	35.0	47.4	3.10	6.20	
	mg/dl (BUN)	19.2	16.3	22.1	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.70	4.96	6.44	0.370	0.740	
	mmol/l	0.331	0.288	0.374	0.022	0.043	Uricase Perox. with ascorb. ox
	mg/dl	5.56	4.84	6.28	0.360	0.720	
	mmol/l	0.332	0.289	0.375	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.58	4.85	6.31	0.365	0.730	

Roche Cobas c303/c503			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.9	35.6	48.2	3.15	6.30	Bromocresol Green
	g/dl	4.19	3.56	4.82	0.315	0.630	
	g/l	41.2	35.0	47.4	3.10	6.20	Bromocresol Purple
	g/dl	4.12	3.50	4.74	0.310	0.620	
	g/l	41.2	35.0	47.4	3.10	6.20	Turbidimetric Assays
Alkaline Phosphatase	U/l	155	132	178	11.5	23.0	AMP optimised to IFCC
	U/l	155	132	178	11.5	23.0	Colorimetric
	U/l	156	133	179	11.5	23.0	Roche AMP buffer IFCC
ALT (GPT)	U/l	42	34	50	4.00	8.00	Colorimetric
	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	55	47	63	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	79	67	91	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	79	67	91	6.00	12.0	Roche Integra 2-chloro-pNPG7
	U/l	78	66	90	6.00	12.0	Roche liquid stable pNPG7
AST (GOT)	U/l	52	42	62	5.00	10.0	Tris buffer without P5P
Bicarbonate	mmol/l	12.8	10.2	15.4	1.30	2.60	Colorimetric
	mmol/l	13.6	10.8	16.4	1.40	2.80	Enzymatic
	mmol/l	13.3	10.5	16.1	1.40	2.80	PEP Carboxylase
Bilirubin, Direct	mg/dl	0.965	0.762	1.17	0.103	0.205	Roche DPD Dumas standardised
	µmol/l	16.5	13.0	20.0	1.75	3.50	
Bilirubin, Total	mg/dl	1.54	1.22	1.86	0.160	0.320	Dichlorophenyl Diazonium
	µmol/l	26.4	20.9	31.9	2.75	5.50	
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	Arsenazo III
	mg/dl	8.54	7.69	9.39	0.425	0.850	
	mmol/l	2.14	1.93	2.35	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.58	7.72	9.44	0.430	0.860	
	mmol/l	2.13	1.92	2.34	0.105	0.210	NM-BAPTA
mg/dl	8.54	7.69	9.39	0.425	0.850		
Chloride	mmol/l	91.0	83.7	98.3	3.65	7.30	ISE, indirect
Cholesterol	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Dehydrogenase
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - IDMS
mg/dl	163	142	184	10.5	21.0		
Cholinesterase	U/l	5741	4593	6889	574	1148	Colorimetric - Butyrylthiocholine
CK, Total	U/l	206	169	243	18.5	37.0	CK-NAC (IFCC)
	U/l	221	181	261	20.0	40.0	Creatine phosphate substrate start

Roche Cobas c303/c503			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.48	1.18	1.78	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Enzymatic UV method
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	IDMS traceable
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Jaffe rate blanked
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate comp. (-18umol/l)
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.55	1.24	1.86	0.155	0.310	Roche Creatinine Plus
	µmol/l	137	110	164	13.5	27.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.04	5.13	6.95	0.455	0.910	Glucose oxidase
	mg/dl	109	92.7	125	8.00	16.0	
	mmol/l	6.03	5.13	6.93	0.450	0.900	Hexokinase
	mg/dl	109	92.7	125	8.00	16.0	
HDL-Cholesterol	mmol/l	1.36	1.16	1.56	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	52.5	44.6	60.4	3.95	7.90	
Iron	µmol/l	18.7	15.3	22.1	1.70	3.40	Colorimetric with ppt.
	µg/dl	105	86.1	124	9.50	19.0	
	µmol/l	18.6	15.3	21.9	1.65	3.30	Colorimetric without ppt.
	µg/dl	104	85.3	123	9.50	19.0	
Lactate	mmol/l	1.53	1.25	1.81	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	13.8	11.3	16.3	1.25	2.50	
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC
	U/l	198	168	228	15.0	30.0	Lactate to Pyruvate methods
Lipase	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)789/ID 0-052
	U/l	33	26	40	3.50	7.00	Roche Turbidimetric with colipase
Lithium	mmol/l	1.04	0.915	1.17	0.065	0.130	Spectrophotometric
	mg/dl	0.722	0.635	0.809	0.044	0.087	
Magnesium	mmol/l	0.948	0.834	1.06	0.056	0.112	Chlorphosphonazo III
	mg/dl	2.30	2.02	2.58	0.140	0.280	
	mmol/l	0.937	0.825	1.05	0.057	0.113	Xylidyl Blue
	mg/dl	2.28	2.01	2.55	0.135	0.270	

Roche Cobas c303/c503			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Osmolality	mOsm/kg	278	222	334	28.0	56.0	Calculated
Phosphate, Inorganic	mmol/l	1.46	1.24	1.68	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.53	3.85	5.21	0.340	0.680	
	mmol/l	1.43	1.22	1.64	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.43	3.77	5.09	0.330	0.660	
Potassium	mmol/l	3.99	3.67	4.31	0.160	0.320	ISE method - indirect
Protein, Total	g/l	58.2	46.6	69.8	5.80	11.6	Biuret reaction, CX4/5/7
	g/dl	5.82	4.66	6.98	0.580	1.16	
	g/l	57.8	46.2	69.4	5.80	11.6	Biuret reaction, end point
	g/dl	5.78	4.62	6.94	0.580	1.16	
	g/l	58.3	46.6	70.0	5.85	11.7	Biuret reaction, kinetic
	g/dl	5.83	4.66	7.00	0.585	1.17	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
TIBC	µmol/l	42.5	33.6	51.4	4.45	8.90	FE+UIBC(saturation with iron)
	µg/dl	238	188	288	25.0	50.0	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	93.8	78.8	109	7.60	15.2	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.08	6.02	8.14	0.530	1.06	Urease, end point
	mg/dl	42.6	36.2	49.0	3.20	6.40	
	mg/dl (BUN)	19.8	16.8	22.8	1.50	3.00	
	mmol/l	7.05	5.99	8.11	0.530	1.06	Urease, kinetic
	mg/dl	42.4	36.0	48.8	3.20	6.40	
	mg/dl (BUN)	19.7	16.7	22.7	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase @ 293 nm
	mg/dl	5.61	4.88	6.34	0.365	0.730	
	mmol/l	0.333	0.290	0.376	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.59	4.86	6.32	0.365	0.730	
	mmol/l	0.332	0.289	0.375	0.022	0.043	Uricase Perox. with ascorb. ox
	mg/dl	5.58	4.85	6.31	0.365	0.730	

Roche Cobas c303/c503			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.332	0.289	0.375	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.58	4.85	6.31	0.365	0.730	
	mmol/l	0.323	0.281	0.365	0.021	0.042	Uricase, catalase 340nm.
	mg/dl	5.43	4.72	6.14	0.355	0.710	

Roche Cobas c311			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.9	35.6	48.2	3.15	6.30	Bromocresol Green
	g/dl	4.19	3.56	4.82	0.315	0.630	
	g/l	42.2	35.9	48.5	3.15	6.30	Bromocresol Purple
	g/dl	4.22	3.59	4.85	0.315	0.630	
	g/l	42.2	35.9	48.5	3.15	6.30	Turbidimetric Assays
	g/dl	4.22	3.59	4.85	0.315	0.630	
Alkaline Phosphatase	U/l	164	139	189	12.5	25.0	AMP optimised to IFCC
	U/l	170	145	195	12.5	25.0	Colorimetric
	U/l	166	141	191	12.5	25.0	Roche AMP buffer IFCC
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	80	68	92	6.00	12.0	Immunoinhibition, EPS substrate
	U/l	56	48	64	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	79	67	91	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	77	65	89	6.00	12.0	Other Roche 2-chloro-pNPG7
	U/l	79	67	91	6.00	12.0	Roche Integra 2-chloro-pNPG7
	U/l	79	67	91	6.00	12.0	Roche liquid stable pNPG7
AST (GOT)	U/l	36	29	43	3.50	7.00	Phosphate buffer, DGKC
	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	13.6	10.8	16.4	1.40	2.80	PEP Carboxylase
Bilirubin, Direct	mg/dl	1.20	0.948	1.45	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.5	16.2	24.8	2.15	4.30	
	mg/dl	1.19	0.940	1.44	0.125	0.250	Roche DPD JG standardised
	µmol/l	20.4	16.1	24.7	2.15	4.30	
Bilirubin, Total	mg/dl	1.61	1.27	1.95	0.170	0.340	Dichlorophenyl Diazonium
	µmol/l	27.5	21.7	33.3	2.90	5.80	
Calcium	mmol/l	2.14	1.93	2.35	0.105	0.210	Arsenazo III
	mg/dl	8.58	7.72	9.44	0.430	0.860	
	mmol/l	2.14	1.93	2.35	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.58	7.72	9.44	0.430	0.860	
	mmol/l	2.14	1.93	2.35	0.105	0.210	NM-BAPTA
	mg/dl	8.58	7.72	9.44	0.430	0.860	
Chloride	mmol/l	90.9	83.6	98.2	3.65	7.30	ISE, indirect
Cholesterol	mmol/l	4.35	3.78	4.92	0.285	0.570	Cholesterol Dehydrogenase
	mg/dl	168	146	190	11.0	22.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	164	143	185	10.5	21.0	
Cholinesterase	U/l	5481	4385	6577	548	1096	Colorimetric - Butyrylthiocholine

Roche Cobas c311			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
CK, Total	U/l	212	174	250	19.0	38.0	CK-NAC (IFCC)
	U/l	214	175	253	19.5	39.0	CK-NAC substrate start (DGKC)
	U/l	208	171	245	18.5	37.0	Creatine phosphate substrate start
Creatinine	mg/dl	1.53	1.22	1.84	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Enzymatic UV method
	µmol/l	133	106	160	13.5	27.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	IDMS traceable
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Jaffe rate blanked
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.54	1.23	1.85	0.155	0.310	Jaffe rate comp. (-18umol/l)
	µmol/l	136	109	163	13.5	27.0	
gamma-GT	mg/dl	1.56	1.25	1.87	0.155	0.310	Roche Creatinine Plus
	µmol/l	138	110	166	14.0	28.0	
glucose	U/l	50	43	57	3.50	7.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.01	5.11	6.91	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	
	mmol/l	6.04	5.13	6.95	0.455	0.910	Hexokinase
	mg/dl	109	92.7	125	8.00	16.0	
HDL-Cholesterol	mmol/l	1.36	1.16	1.56	0.100	0.200	Direct HDL, Clearance method
	mg/dl	52.5	44.6	60.4	3.95	7.90	
	mmol/l	1.35	1.15	1.55	0.100	0.200	Direct HDL, PEGME
	mg/dl	52.1	44.3	59.9	3.90	7.80	
	mmol/l	1.34	1.14	1.54	0.100	0.200	Direct HDL, PPD
	mg/dl	51.7	43.9	59.5	3.90	7.80	
	mmol/l	1.34	1.14	1.54	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	51.7	43.9	59.5	3.90	7.80	
Iron	µmol/l	19.5	16.0	23.0	1.75	3.50	Colorimetric with ppt.
	µg/dl	109	89.4	129	10.0	20.0	
	µmol/l	19.0	15.6	22.4	1.70	3.40	Colorimetric without ppt.
	µg/dl	106	86.9	125	9.50	19.0	
Lactate	mmol/l	1.54	1.26	1.82	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	13.9	11.4	16.4	1.25	2.50	
LD (LDH)	U/l	198	168	228	15.0	30.0	L to P IFCC
	U/l	197	167	227	15.0	30.0	Lactate to Pyruvate methods

Roche Cobas c311			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Lipase	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)789/ID 0-052
	U/l	33	26	40	3.50	7.00	Roche Turbidimetric with colipase
Lithium	mmol/l	1.01	0.889	1.13	0.060	0.120	Spectrophotometric
	mg/dl	0.701	0.617	0.785	0.042	0.084	
Magnesium	mmol/l	0.923	0.812	1.03	0.054	0.107	Atomic absorption
	mg/dl	2.24	1.97	2.51	0.135	0.270	
	mmol/l	0.923	0.812	1.03	0.054	0.107	Chlorphosphonazo III
	mg/dl	2.24	1.97	2.51	0.135	0.270	
	mmol/l	0.919	0.809	1.03	0.056	0.111	Xylidyl Blue
	mg/dl	2.23	1.96	2.50	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.46	3.79	5.13	0.335	0.670	
	mmol/l	1.45	1.23	1.67	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.50	3.83	5.17	0.335	0.670	
Potassium	mmol/l	3.98	3.66	4.30	0.160	0.320	ISE method - indirect
Protein, Total	g/l	58.0	46.4	69.6	5.80	11.6	Biuret reaction, end point
	g/dl	5.80	4.64	6.96	0.580	1.16	
	g/l	59.6	47.7	71.5	5.95	11.9	Biuret reaction, kinetic
	g/dl	5.96	4.77	7.15	0.595	1.19	
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - indirect
TIBC	µmol/l	42.1	33.3	50.9	4.40	8.80	Direct Colorimetric
	µg/dl	235	186	284	24.5	49.0	
	µmol/l	43.3	34.2	52.4	4.55	9.10	FE+UIBC(saturation with iron)
	µg/dl	242	191	293	25.5	51.0	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	93.8	78.8	109	7.60	15.2	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.33	6.23	8.43	0.550	1.10	Urease, end point
	mg/dl	44.1	37.5	50.7	3.30	6.60	
	mg/dl (BUN)	20.5	17.4	23.6	1.55	3.10	

Roche Cobas c311			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	7.23	6.15	8.31	0.540	1.08	Urease, kinetic
	mg/dl	43.5	37.0	50.0	3.25	6.50	
	mg/dl (BUN)	20.3	17.3	23.3	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.336	0.292	0.380	0.022	0.044	Uricase @ 293 nm
	mg/dl	5.64	4.91	6.37	0.365	0.730	
	mmol/l	0.335	0.291	0.379	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.63	4.90	6.36	0.365	0.730	
	mmol/l	0.336	0.292	0.380	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.64	4.91	6.37	0.365	0.730	
mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm	
mg/dl	5.71	4.97	6.45	0.370	0.740		
Zinc	µmol/l	25.0	20.0	30.0	2.50	5.00	Colorimetric without deprot.
	µg/dl	163	130	196	16.5	33.0	

Roche Cobas c501/c502			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.1	35.8	48.4	3.15	6.30	Bromocresol Green
	g/dl	4.21	3.58	4.84	0.315	0.630	
	g/l	41.8	35.5	48.1	3.15	6.30	Bromocresol Purple
	g/dl	4.18	3.55	4.81	0.315	0.630	
	g/l	40.5	34.4	46.6	3.05	6.10	Turbidimetric Assays
	g/dl	4.05	3.44	4.66	0.305	0.610	
Alkaline Phosphatase	U/l	168	143	193	12.5	25.0	AMP optimised to IFCC
	U/l	172	146	198	13.0	26.0	Colorimetric
	U/l	169	144	194	12.5	25.0	Roche AMP buffer IFCC
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	55	47	63	4.00	8.00	Immunoinhibition, EPS substrate
	U/l	55	47	63	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	78	66	90	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	80	68	92	6.00	12.0	Other Roche 2-chloro-pNPG7
	U/l	79	67	91	6.00	12.0	Roche Integra 2-chloro-pNPG7
	U/l	79	67	91	6.00	12.0	Roche liquid stable pNPG7
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	13.9	11.0	16.8	1.45	2.90	Colorimetric
	mmol/l	13.7	10.9	16.5	1.40	2.80	Enzymatic
	mmol/l	13.8	10.9	16.7	1.45	2.90	PEP Carboxylase
Bile Acids	µmol/l	24.9	19.9	29.9	2.50	5.00	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.15	0.909	1.39	0.120	0.240	Diazo with Dichloroaniline
	µmol/l	19.7	15.6	23.8	2.05	4.10	
	mg/dl	1.18	0.932	1.43	0.125	0.250	Diazo with Sulphanilic Acid
	µmol/l	20.2	16.0	24.4	2.10	4.20	
	mg/dl	1.17	0.924	1.42	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.0	15.8	24.2	2.10	4.20	
	mg/dl	1.19	0.940	1.44	0.125	0.250	Roche DPD JG standardised
	µmol/l	20.3	16.0	24.6	2.15	4.30	
Calcium	mmol/l	2.17	1.95	2.39	0.110	0.220	Arsenazo III
	mg/dl	8.70	7.83	9.57	0.435	0.870	
	mmol/l	2.13	1.92	2.34	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.54	7.69	9.39	0.425	0.850	
	mmol/l	2.13	1.92	2.34	0.105	0.210	NM-BAPTA
	mg/dl	8.54	7.69	9.39	0.425	0.850	
Chloride	mmol/l	90.5	83.3	97.7	3.60	7.20	ISE, indirect
Cholesterol	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Dehydrogenase
	mg/dl	163	142	184	10.5	21.0	

Roche Cobas c501/c502			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cholesterol	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	163	142	184	10.5	21.0	
Cholinesterase	U/l	5616	4493	6739	562	1123	Colorimetric - Benzoylcholine
	U/l	5628	4502	6754	563	1126	Colorimetric - Butyrylthiocholine
CK, Total	U/l	210	172	248	19.0	38.0	CK-NAC (IFCC)
	U/l	206	169	243	18.5	37.0	CK-NAC serum start (DGKC)
	U/l	206	169	243	18.5	37.0	CK-NAC substrate start (DGKC)
	U/l	207	170	244	18.5	37.0	Creatine phosphate substrate start
Copper	µmol/l	17.4	13.9	20.9	1.75	3.50	Colorimetric
	µg/dl	111	88.8	133	11.0	22.0	
Creatinine	mg/dl	1.50	1.20	1.80	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	133	106	160	13.5	27.0	
	mg/dl	1.57	1.26	1.88	0.155	0.310	Creatinine PAP method
	µmol/l	139	111	167	14.0	28.0	
	mg/dl	1.54	1.23	1.85	0.155	0.310	Enzymatic UV method
	µmol/l	136	109	163	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Jaffe rate comp. (-18umol/l)
	µmol/l	134	107	161	13.5	27.0	
mg/dl	1.55	1.24	1.86	0.155	0.310	Roche Creatinine Plus	
µmol/l	137	110	164	13.5	27.0		
D-3-Hydroxybutyrate	mmol/l	0.298	0.253	0.343	0.023	0.045	Tris buffer 100mmol pH 8.5
Free T4	pmol/l	19.7	14.8	24.6	2.45	4.90	Roche Cobas e601/ 602
	pg/ml	15.4	11.6	19.2	1.90	3.80	
	ng/dl	1.54	1.16	1.92	0.190	0.380	
gamma-GT	U/l	49	42	56	3.50	7.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	55	47	63	4.00	8.00	Gamma glutamyl-4-nitroanilide
Glucose	mmol/l	5.98	5.08	6.88	0.450	0.900	Glucose dehydrogenase
	mg/dl	108	91.8	124	8.00	16.0	
	mmol/l	6.04	5.13	6.95	0.455	0.910	Glucose oxidase
	mg/dl	109	92.7	125	8.00	16.0	
	mmol/l	6.00	5.10	6.90	0.450	0.900	Hexokinase
	mg/dl	108	91.8	124	8.00	16.0	

Roche Cobas c501/c502			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.34	1.14	1.54	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	51.7	43.9	59.5	3.90	7.80	
Iron	µmol/l	18.9	15.5	22.3	1.70	3.40	Colorimetric with ppt.
	µg/dl	106	86.9	125	9.50	19.0	
	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric without ppt.
	µg/dl	107	87.7	126	9.50	19.0	
Lactate	mmol/l	1.54	1.26	1.82	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	13.9	11.4	16.4	1.25	2.50	
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC
	U/l	203	173	233	15.0	30.0	Lactate to Pyruvate methods
Lipase	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)789/ID 0-052
	U/l	32	26	38	3.00	6.00	Roche Turbidimetric with colipase
Lithium	mmol/l	1.02	0.898	1.14	0.060	0.120	ISE method - indirect
	mg/dl	0.708	0.623	0.793	0.043	0.085	
	mmol/l	1.02	0.898	1.14	0.060	0.120	Spectrophotometric
	mg/dl	0.708	0.623	0.793	0.043	0.085	
Magnesium	mmol/l	0.958	0.843	1.07	0.056	0.112	Arsenazo III
	mg/dl	2.33	2.05	2.61	0.140	0.280	
	mmol/l	0.917	0.807	1.03	0.057	0.113	Atomic absorption
	mg/dl	2.23	1.96	2.50	0.135	0.270	
	mmol/l	0.932	0.820	1.04	0.054	0.108	Chlorphosphonazo III
	mg/dl	2.26	1.99	2.53	0.135	0.270	
	mmol/l	0.944	0.831	1.06	0.058	0.116	Enzymatic
	mg/dl	2.29	2.02	2.56	0.135	0.270	
	mmol/l	0.929	0.818	1.04	0.056	0.111	Xylidyl Blue
	mg/dl	2.26	1.99	2.53	0.135	0.270	
Osmolality	mOsm/kg	286	229	343	28.5	57.0	Calculated
Phosphate, Inorganic	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.46	3.79	5.13	0.335	0.670	
	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.46	3.79	5.13	0.335	0.670	
Potassium	mmol/l	3.98	3.66	4.30	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.8	46.2	69.4	5.80	11.6	Biuret reaction, end point
	g/dl	5.78	4.62	6.94	0.580	1.16	
	g/l	57.9	46.3	69.5	5.80	11.6	Biuret reaction, kinetic
	g/dl	5.79	4.63	6.95	0.580	1.16	
PSA, Total	ng/ml	10.3	7.73	12.9	1.30	2.60	Roche Cobas e601/602
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect

Roche Cobas c501/c502			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Thyroid Stimulating Hormone (TSH)	µU/ml	1.67	1.34	2.00	0.165	0.330	Roche Cobas e601/ 602
TIBC	µmol/l	44.9	35.5	54.3	4.70	9.40	Calculated from Transferrin
	µg/dl	251	198	304	26.5	53.0	
	µmol/l	42.3	33.4	51.2	4.45	8.90	Direct Colorimetric
	µg/dl	236	186	286	25.0	50.0	
	µmol/l	41.9	33.1	50.7	4.40	8.80	FE+UIBC(saturation with iron)
	µg/dl	234	185	283	24.5	49.0	
Total T4	nmol/l	87.5	65.6	109	10.8	21.5	Roche Cobas e601/ 602
	ng/ml	68.3	51.2	85.4	8.55	17.1	
	µg/dl	6.83	5.12	8.54	0.855	1.71	
Triglycerides	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.18	6.10	8.26	0.540	1.08	Urease, end point
	mg/dl	43.2	36.7	49.7	3.25	6.50	
	mg/dl (BUN)	20.1	17.1	23.1	1.50	3.00	
	mmol/l	7.14	6.07	8.21	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl (BUN)	20.0	17.0	23.0	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.331	0.288	0.374	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.56	4.84	6.28	0.360	0.720	
	mmol/l	0.333	0.290	0.376	0.022	0.043	Uricase Perox. with ascorb. ox
	mg/dl	5.59	4.86	6.32	0.365	0.730	
	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.61	4.88	6.34	0.365	0.730	
	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase, catalase 340nm.
	mg/dl	5.61	4.88	6.34	0.365	0.730	

Roche Cobas c701/c702/c711			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.7	35.4	48.0	3.15	6.30	Bromocresol Green
	g/dl	4.17	3.54	4.80	0.315	0.630	
	g/l	40.5	34.4	46.6	3.05	6.10	Turbidimetric Assays
	g/dl	4.05	3.44	4.66	0.305	0.610	
Alkaline Phosphatase	U/l	163	139	187	12.0	24.0	AMP optimised to IFCC
	U/l	162	138	186	12.0	24.0	Roche AMP buffer IFCC
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	55	47	63	4.00	8.00	Immunoinhibition, EPS substrate
	U/l	55	47	63	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	80	68	92	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	79	67	91	6.00	12.0	Roche liquid stable pNPG7
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	14.6	11.6	17.6	1.50	3.00	Enzymatic
Bile Acids	µmol/l	25.1	20.1	30.1	2.50	5.00	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.19	0.940	1.44	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.4	16.1	24.7	2.15	4.30	
	mg/dl	1.08	0.853	1.31	0.115	0.230	Roche DPD Doumas standardised
	µmol/l	18.5	14.6	22.4	1.95	3.90	
	mg/dl	1.21	0.956	1.46	0.125	0.250	Roche DPD JG standardised
	µmol/l	20.6	16.3	24.9	2.15	4.30	
Calcium	mmol/l	2.12	1.91	2.33	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.50	7.65	9.35	0.425	0.850	
	mmol/l	2.11	1.90	2.32	0.105	0.210	NM-BAPTA
	mg/dl	8.46	7.61	9.31	0.425	0.850	
Chloride	mmol/l	90.9	83.6	98.2	3.65	7.30	ISE, indirect
Cholesterol	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	163	142	184	10.5	21.0	
Cholinesterase	U/l	5656	4525	6787	566	1131	Colorimetric - Butyrylthiocholine
CK, Total	U/l	209	171	247	19.0	38.0	CK-NAC (IFCC)
	U/l	197	162	232	17.5	35.0	CK-NAC substrate start (DGKC)
Copper	µmol/l	18.5	14.8	22.2	1.85	3.70	Colorimetric
	µg/dl	118	94.4	142	12.0	24.0	
Creatinine	mg/dl	1.55	1.24	1.86	0.155	0.310	IDMS traceable
	µmol/l	137	110	164	13.5	27.0	
	mg/dl	1.55	1.24	1.86	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	137	110	164	13.5	27.0	

Roche Cobas c701/c702/c711			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.55	1.24	1.86	0.155	0.310	Jaffe rate comp. (-18umol/l)
	µmol/l	137	110	164	13.5	27.0	
	mg/dl	1.57	1.26	1.88	0.155	0.310	Roche Creatinine Plus
	µmol/l	139	111	167	14.0	28.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.00	5.10	6.90	0.450	0.900	Hexokinase
	mg/dl	108	91.8	124	8.00	16.0	
HDL-Cholesterol	mmol/l	1.35	1.15	1.55	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	52.1	44.3	59.9	3.90	7.80	
Iron	µmol/l	18.5	15.2	21.8	1.65	3.30	Colorimetric without ppt.
	µg/dl	103	84.5	122	9.50	19.0	
Lactate	mmol/l	1.50	1.23	1.77	0.135	0.270	Colorimetric - Lactate oxidase
	mg/dl	13.5	11.1	15.9	1.20	2.40	
LD (LDH)	U/l	198	168	228	15.0	30.0	L to P IFCC
Lipase	U/l	33	26	40	3.50	7.00	Colorimetric Roche ACN(8)789/ID 0-052
Lithium	mmol/l	1.02	0.898	1.14	0.060	0.120	Spectrophotometric
	mg/dl	0.708	0.623	0.793	0.043	0.085	
Magnesium	mmol/l	0.933	0.821	1.05	0.059	0.117	Chlorphosphonazo III
	mg/dl	2.27	2.00	2.54	0.135	0.270	
	mmol/l	0.937	0.825	1.05	0.057	0.113	Xylidyl Blue
	mg/dl	2.28	2.01	2.55	0.135	0.270	
Osmolality	mOsm/kg	288	230	346	29.0	58.0	Calculated
Phosphate, Inorganic	mmol/l	1.42	1.21	1.63	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.40	3.74	5.06	0.330	0.660	
Potassium	mmol/l	3.96	3.64	4.28	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.7	46.2	69.2	5.75	11.5	Biuret reaction, end point
	g/dl	5.77	4.62	6.92	0.575	1.15	
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - indirect
TIBC	µmol/l	42.7	33.7	51.7	4.50	9.00	FE+UIBC(saturation with iron)
	µg/dl	239	189	289	25.0	50.0	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	88.5	74.3	103	7.25	14.5	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	89.4	75.1	104	7.30	14.6	

Roche Cobas c701/c702/c711			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	7.02	5.97	8.07	0.525	1.05	Urease, kinetic
	mg/dl	42.2	35.9	48.5	3.15	6.30	
	mg/dl (BUN)	19.7	16.7	22.7	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.328	0.285	0.371	0.022	0.043	Uricase perox. no ascorb. ox.
	mg/dl	5.51	4.79	6.23	0.360	0.720	
	mmol/l	0.326	0.284	0.368	0.021	0.042	Uricase Perox. with ascorb. ox
	mg/dl	5.48	4.77	6.19	0.355	0.710	
	mmol/l	0.329	0.286	0.372	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.53	4.81	6.25	0.360	0.720	

Roche Cobas e402/ e801			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	21.3	16.0	26.6	2.65	5.30	Roche Cobas e402/e801
	pg/ml	16.6	12.5	20.7	2.05	4.10	
	ng/dl	1.66	1.25	2.07	0.205	0.410	
PSA, Total	ng/ml	9.82	7.37	12.3	1.24	2.48	Roche Cobas e402/e801
Thyroid Stimulating Hormone (TSH)	µU/ml	1.61	1.29	1.93	0.160	0.320	Roche Cobas e402/e801
Total T3	nmol/l	2.48	1.86	3.10	0.310	0.620	Roche Cobas e402/e801
	ng/ml	1.61	1.21	2.01	0.200	0.400	
	ng/dl	161	121	201	20.0	40.0	
Total T4	nmol/l	89.2	66.9	112	11.4	22.8	Roche Cobas e402/e801
	ng/ml	69.6	52.2	87.0	8.70	17.4	
	µg/dl	6.96	5.22	8.70	0.870	1.74	

Roche Cobas e411			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.5	15.4	25.6	2.55	5.10	Roche Cobas 4000/e411
	pg/ml	16.0	12.0	20.0	2.00	4.00	
	ng/dl	1.60	1.20	2.00	0.200	0.400	
PSA, Total	ng/ml	10.5	7.88	13.1	1.30	2.60	Roche Cobas 4000/e411
Thyroid Stimulating Hormone (TSH)	µU/ml	1.69	1.35	2.03	0.170	0.340	Roche Cobas 4000/e411
	µU/ml	1.70	1.36	2.04	0.170	0.340	Roche Elecsys
Total T3	nmol/l	2.43	1.82	3.04	0.305	0.610	Roche Cobas 4000/e411
	ng/ml	1.58	1.19	1.97	0.195	0.390	
	ng/dl	158	119	197	19.5	39.0	
Total T4	nmol/l	93.2	69.9	117	11.9	23.8	Roche Cobas 4000/e411
	ng/ml	72.7	54.5	90.9	9.10	18.2	
	µg/dl	7.27	5.45	9.09	0.910	1.82	
	nmol/l	89.6	67.2	112	11.2	22.4	Roche Elecsys
	ng/ml	69.9	52.4	87.4	8.75	17.5	
	µg/dl	6.99	5.24	8.74	0.875	1.75	

Roche Cobas e601/602			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.4	34.3	46.5	3.05	6.10	Bromocresol Green
	g/dl	4.04	3.43	4.65	0.305	0.610	
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Amylase, Total	U/l	79	67	91	6.00	12.0	Roche liquid stable pNPG7
Cholesterol	mmol/l	4.23	3.68	4.78	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
Free T4	pmol/l	20.1	15.1	25.1	2.50	5.00	Roche Cobas e601/ 602
	pg/ml	15.7	11.8	19.6	1.95	3.90	
	ng/dl	1.57	1.18	1.96	0.195	0.390	
Glucose	mmol/l	6.15	5.23	7.07	0.460	0.920	Hexokinase
	mg/dl	111	94.4	128	8.50	17.0	
HDL-Cholesterol	mmol/l	1.33	1.13	1.53	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	51.3	43.6	59.0	3.85	7.70	
Potassium	mmol/l	3.86	3.55	4.17	0.155	0.310	ISE method - indirect
Protein, Total	g/l	56.4	45.1	67.7	5.65	11.3	Biuret reaction, end point
	g/dl	5.64	4.51	6.77	0.565	1.13	
PSA, Total	ng/ml	10.5	7.88	13.1	1.30	2.60	Roche Cobas e601/602
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone (TSH)	µU/ml	1.69	1.35	2.03	0.170	0.340	Roche Cobas e601/ 602
Total T3	nmol/l	2.37	1.78	2.96	0.295	0.590	Roche Cobas e601/602
	ng/ml	1.54	1.16	1.92	0.190	0.380	
	ng/dl	154	116	192	19.0	38.0	
Total T4	nmol/l	89.7	67.3	112	11.2	22.3	Roche Cobas e601/ 602
	ng/ml	70.0	52.5	87.5	8.75	17.5	
	µg/dl	7.00	5.25	8.75	0.875	1.75	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
Urea	mmol/l	7.05	5.99	8.11	0.530	1.06	Urease, kinetic
	mg/dl	42.4	36.0	48.8	3.20	6.40	
	mg/dl (BUN)	19.7	16.7	22.7	1.50	3.00	

Roche Elecsys			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.9	15.7	26.1	2.60	5.20	Roche Elecsys
	pg/ml	16.3	12.2	20.4	2.05	4.10	
	ng/dl	1.63	1.22	2.04	0.205	0.410	

Roche Integra			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.7	36.3	49.1	3.20	6.40	Bromocresol Green
	g/dl	4.27	3.63	4.91	0.320	0.640	
	g/l	41.7	35.4	48.0	3.15	6.30	Bromocresol Purple
	g/dl	4.17	3.54	4.80	0.315	0.630	
	g/l	41.1	34.9	47.3	3.10	6.20	Turbidimetric Assays
	g/dl	4.11	3.49	4.73	0.310	0.620	
Alkaline Phosphatase	U/l	167	142	192	12.5	25.0	AMP optimised to IFCC
	U/l	175	149	201	13.0	26.0	Colorimetric
	U/l	170	145	195	12.5	25.0	Roche AMP buffer IFCC
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	56	48	64	4.00	8.00	Roche liquid stable pNPG7
Amylase, Total	U/l	78	66	90	6.00	12.0	BM/Roche Colorimetric pNPG7
	U/l	80	68	92	6.00	12.0	Roche Integra 2-chloro-pNPG7
	U/l	80	68	92	6.00	12.0	Roche liquid stable pNPG7
AST (GOT)	U/l	33	26	40	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	13.8	10.9	16.7	1.45	2.90	Enzymatic
Bilirubin, Direct	mg/dl	1.18	0.932	1.43	0.125	0.250	Diazo with Dichloroaniline
	µmol/l	20.1	15.9	24.3	2.10	4.20	
	mg/dl	1.18	0.932	1.43	0.125	0.250	Diazo with Sulphanilic Acid
	µmol/l	20.2	16.0	24.4	2.10	4.20	
	mg/dl	1.18	0.932	1.43	0.125	0.250	Dichlorophenyl Diazonium
	µmol/l	20.1	15.9	24.3	2.10	4.20	
	mg/dl	1.18	0.932	1.43	0.125	0.250	Roche DPD Doumas standardised
	µmol/l	20.1	15.9	24.3	2.10	4.20	
Calcium	mg/dl	1.19	0.940	1.44	0.125	0.250	Roche DPD JG standardised
	µmol/l	20.4	16.1	24.7	2.15	4.30	
	mmol/l	2.12	1.91	2.33	0.105	0.210	Arsenazo III
	mg/dl	8.50	7.65	9.35	0.425	0.850	
	mmol/l	2.14	1.93	2.35	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.58	7.72	9.44	0.430	0.860	
Chloride	mmol/l	2.12	1.91	2.33	0.105	0.210	NM-BAPTA
	mg/dl	8.50	7.65	9.35	0.425	0.850	
Chloride	mmol/l	94.0	86.5	102	4.00	8.00	ISE, indirect
Cholesterol	mmol/l	4.15	3.61	4.69	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	139	181	10.5	21.0	
	mmol/l	4.17	3.63	4.71	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	161	140	182	10.5	21.0	
Cholinesterase	U/l	5716	4573	6859	572	1143	Colorimetric - Butyrylthiocholine
CK, Total	U/l	210	172	248	19.0	38.0	CK-NAC (IFCC)

Roche Integra			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
CK, Total	U/l	221	181	261	20.0	40.0	CK-NAC serum start (DGKC)
	U/l	210	172	248	19.0	38.0	CK-NAC substrate start (DGKC)
	U/l	211	173	249	19.0	38.0	Creatine phosphate substrate start
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.41	1.13	1.69	0.140	0.280	Alkaline picrate with deproteinisation
	µmol/l	125	100	150	12.5	25.0	
	mg/dl	1.49	1.19	1.79	0.150	0.300	IDMS traceable
	µmol/l	132	106	158	13.0	26.0	
	mg/dl	1.39	1.11	1.67	0.140	0.280	Jaffe rate blanked
	µmol/l	123	98.4	148	12.5	25.0	
	mg/dl	1.44	1.15	1.73	0.145	0.290	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	127	102	152	12.5	25.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate comp. (-18umol/l)
	µmol/l	128	102	154	13.0	26.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Roche Creatinine Plus
	µmol/l	134	107	161	13.5	27.0	
gamma-GT	U/l	51	43	59	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.14	5.22	7.06	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
	mmol/l	6.09	5.18	7.00	0.455	0.910	Hexokinase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.35	1.15	1.55	0.100	0.200	Direct HDL, Roche 4th gen.
	mg/dl	52.1	44.3	59.9	3.90	7.80	
Iron	µmol/l	19.5	16.0	23.0	1.75	3.50	Colorimetric with ppt.
	µg/dl	109	89.4	129	10.0	20.0	
	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric without ppt.
	µg/dl	107	87.7	126	9.50	19.0	
Lactate	mmol/l	1.54	1.26	1.82	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	13.9	11.4	16.4	1.25	2.50	
LD (LDH)	U/l	205	174	236	15.5	31.0	L to P IFCC
	U/l	205	174	236	15.5	31.0	Lactate to Pyruvate methods
Lipase	U/l	32	26	38	3.00	6.00	Colorimetric Roche ACN(8)789/ID 0-052
	U/l	33	26	40	3.50	7.00	Roche Turbidimetric with colipase
Lithium	mmol/l	1.00	0.880	1.12	0.060	0.120	ISE method - indirect
	mg/dl	0.694	0.611	0.777	0.042	0.083	
Magnesium	mmol/l	0.920	0.810	1.03	0.055	0.110	Chlorphosphonazo III
	mg/dl	2.24	1.97	2.51	0.135	0.270	

Roche Integra		HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Magnesium	mmol/l	0.928	0.817	1.04	0.056	0.112	Xylidyl Blue
	mg/dl	2.26	1.99	2.53	0.135	0.270	
Osmolality	mOsm/kg	285	228	342	28.5	57.0	Calculated
Phosphate, Inorganic	mmol/l	1.47	1.25	1.69	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.56	3.88	5.24	0.340	0.680	
	mmol/l	1.48	1.26	1.70	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.59	3.90	5.28	0.345	0.690	
Potassium	mmol/l	3.92	3.61	4.23	0.155	0.310	ISE method - indirect
Protein, Total	g/l	56.3	45.0	67.6	5.65	11.3	Biuret reaction, end point
	g/dl	5.63	4.50	6.76	0.565	1.13	
	g/l	55.9	44.7	67.1	5.60	11.2	Biuret reaction, kinetic
	g/dl	5.59	4.47	6.71	0.560	1.12	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - indirect
TIBC	µmol/l	41.8	33.0	50.6	4.40	8.80	FE+UIBC(saturation with iron)
	µg/dl	234	185	283	24.5	49.0	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.02	0.857	1.18	0.080	0.160	Lipase/GK UV., 0.11 mmol/l correction
	mg/dl	90.3	75.9	105	7.35	14.7	
	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GPO-PAP, 0.11mmol/l correction
	mg/dl	89.4	75.1	104	7.30	14.6	
Urea	mmol/l	6.89	5.86	7.92	0.515	1.03	Urease, end point
	mg/dl	41.4	35.2	47.6	3.10	6.20	
	mg/dl (BUN)	19.3	16.4	22.2	1.45	2.90	
	mmol/l	6.93	5.89	7.97	0.520	1.04	Urease, kinetic
	mg/dl	41.6	35.4	47.8	3.10	6.20	
	mg/dl (BUN)	19.4	16.5	22.3	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.78	5.03	6.53	0.375	0.750	

Roche Integra			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.78	5.03	6.53	0.375	0.750	

Seac FP-20 Flame Photometer			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	Flame photometry
Sodium	mmol/l	137	130	144	3.50	7.00	Flame photometry

Seamaty SD1			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.9	34.8	47.0	3.05	6.10	Bromocresol Green
	g/dl	4.09	3.48	4.70	0.305	0.610	
Alkaline Phosphatase	U/l	180	153	207	13.5	27.0	AMP optimised to IFCC
ALT (GPT)	U/l	48	38	58	5.00	10.0	Tris buffer without P5P
Amylase, Total	U/l	77	65	89	6.00	12.0	pNP Maltotrioside substrates
AST (GOT)	U/l	33	26	40	3.50	7.00	Tris buffer without P5P
Bicarbonate	mmol/l	18.1	14.4	21.8	1.85	3.70	Ortho Vitros MicroSlide Systems
Bilirubin, Direct	mg/dl	1.14	0.901	1.38	0.120	0.240	Oxidation to Biliverdin/Vanadate
	µmol/l	19.5	15.4	23.6	2.05	4.10	
Bilirubin, Total	mg/dl	1.92	1.52	2.32	0.200	0.400	Oxidation to Biliverdin/Vanadate
	µmol/l	32.8	25.9	39.7	3.45	6.90	
Calcium	mmol/l	2.19	1.97	2.41	0.110	0.220	Arsenazo III
	mg/dl	8.78	7.90	9.66	0.440	0.880	
Chloride	mmol/l	93.1	85.7	101	3.95	7.90	Colorimetric
Creatinine	mg/dl	1.37	1.10	1.64	0.135	0.270	Creatinine PAP method
	µmol/l	121	96.8	145	12.0	24.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
Lipase	U/l	43	34	52	4.50	9.00	Colorimetric Randox
Magnesium	mmol/l	0.901	0.793	1.01	0.055	0.109	Enzymatic
	mg/dl	2.19	1.93	2.45	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.44	1.22	1.66	0.110	0.220	Phosphomolybdate enzymatic
	mg/dl	4.46	3.79	5.13	0.335	0.670	
Potassium	mmol/l	3.96	3.64	4.28	0.160	0.320	Enzymatic
Protein, Total	g/l	58.9	47.1	70.7	5.90	11.8	Biuret reaction, end point
	g/dl	5.89	4.71	7.07	0.590	1.18	
Sodium	mmol/l	138	131	145	3.50	7.00	Ortho Vitros MicroSlide Systems
Urea	mmol/l	7.23	6.15	8.31	0.540	1.08	Urease, kinetic
	mg/dl	43.5	37.0	50.0	3.25	6.50	
	mg/dl	20.3	17.3	23.3	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.322	0.280	0.364	0.021	0.042	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.41	4.71	6.11	0.350	0.700	

Semi Automated Chemistry analyser			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
Glucose	mmol/l	6.13	5.21	7.05	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	

Sensa Core ST series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Chloride	mmol/l	97.4	89.6	105	3.80	7.60	ISE, direct
Potassium	mmol/l	3.81	3.51	4.11	0.150	0.300	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

SFRI BSA 3000			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Cholesterol	mmol/l	4.13	3.59	4.67	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	138	180	10.5	21.0	

SFRI ISE electrolyte series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium	mmol/l	2.29	2.06	2.52	0.115	0.230	Ion Selective Electrode
	mg/dl	9.18	8.26	10.1	0.460	0.920	
Calcium, Ionised	mmol/l	1.15	1.04	1.26	0.055	0.110	Ion Selective Electrode
	mg/dl	4.61	4.15	5.07	0.230	0.460	
Chloride	mmol/l	95.2	87.6	103	3.90	7.80	ISE, direct
Potassium	mmol/l	3.90	3.59	4.21	0.155	0.310	ISE method - direct
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct

Shenzhen Heto Medical AU240

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Glucose	mmol/l	6.47	5.50	7.44	0.485	0.970	Glucose oxidase
	mg/dl	117	99.5	135	9.00	18.0	
Urea	mmol/l	7.25	6.16	8.34	0.545	1.09	Urease, kinetic
	mg/dl	43.6	37.1	50.1	3.25	6.50	
	mg/dl (BUN)	20.3	17.3	23.3	1.50	3.00	

Shenzhen YHLO iFlash Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Total T3	nmol/l	2.40	1.80	3.00	0.300	0.600	Shenzhen YHLO iFlash Series
	ng/ml	1.56	1.17	1.95	0.195	0.390	
	ng/dl	156	117	195	19.5	39.0	

Shimadzu			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Copper	µmol/l	18.3	14.6	22.0	1.85	3.70	Atomic absorption
	µg/dl	116	92.8	139	11.5	23.0	

Siemens / Bayer			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Calcium, Ionised	mmol/l	0.898	0.808	0.988	0.045	0.090	Ion Selective Electrode
	mg/dl	3.60	3.24	3.96	0.180	0.360	
Chloride	mmol/l	100	92.0	108	4.00	8.00	ISE, direct
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - direct

Siemens ADVIA Centaur CP			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	18.8	14.1	23.5	2.35	4.70	Siemens Centaur XP/XPT
	pg/ml	14.7	11.0	18.4	1.85	3.70	
	ng/dl	1.47	1.10	1.84	0.185	0.370	
PSA, Total	ng/ml	8.83	6.62	11.0	1.09	2.17	Siemens Centaur CP

Siemens ADVIA Centaur XP/XPT/ Classic

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	18.0	13.5	22.5	2.25	4.50	Siemens Centaur XP/XPT
	pg/ml	14.0	10.5	17.5	1.75	3.50	
	ng/dl	1.40	1.05	1.75	0.175	0.350	
PSA, Total	ng/ml	8.93	6.70	11.2	1.14	2.27	Siemens Centaur XP/XPT
Thyroid Stimulating Hormone (TSH)	µU/ml	1.40	1.12	1.68	0.140	0.280	Siemens Centaur XP TSH3-Ultra
	µU/ml	1.52	1.22	1.82	0.150	0.300	Siemens Centaur XP/XPT
Total T3	nmol/l	2.33	1.75	2.91	0.290	0.580	Siemens Centaur XP/XPT
	ng/ml	1.52	1.14	1.90	0.190	0.380	
	ng/dl	152	114	190	19.0	38.0	

Siemens ADVIA Chemistry Instruments

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Green
	g/dl	4.00	3.40	4.60	0.300	0.600	
Alkaline Phosphatase	U/l	153	130	176	11.5	23.0	AMP non-optimised
	U/l	163	139	187	12.0	24.0	AMP optimised to IFCC
ALT (GPT)	U/l	44	35	53	4.50	9.00	Tris buffer without P5P
Amylase, Total	U/l	79	67	91	6.00	12.0	Siemens - blocked pNPG7
AST (GOT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
Bicarbonate	mmol/l	16.0	12.7	19.3	1.65	3.30	Enzymatic
Bile Acids	µmol/l	24.2	19.4	29.0	2.40	4.80	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.11	0.877	1.34	0.115	0.230	Oxidation to Biliverdin/Vanadate
	µmol/l	18.9	14.9	22.9	2.00	4.00	
Bilirubin, Total	mg/dl	1.90	1.50	2.30	0.200	0.400	Oxidation to Biliverdin/Vanadate
	µmol/l	32.4	25.6	39.2	3.40	6.80	
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	Arsenazo III
	mg/dl	8.54	7.69	9.39	0.425	0.850	
Chloride	mmol/l	95.2	87.6	103	3.90	7.80	ISE, indirect
Cholesterol	mmol/l	4.22	3.67	4.77	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	164	143	185	10.5	21.0	
CK, Total	U/l	212	174	250	19.0	38.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.51	1.21	1.81	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Alkaline picrate with deproteinisation
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Creatinine PAP method
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Enzymatic UV method
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate comp. (-18µmol/l)
	µmol/l	135	108	162	13.5	27.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro.
	U/l	52	44	60	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.12	5.20	7.04	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	

Siemens ADVIA Chemistry Instruments

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Glucose	mmol/l	5.92	5.03	6.81	0.445	0.890	Hexokinase
	mg/dl	107	91.0	123	8.00	16.0	
HDL-Cholesterol	mmol/l	1.18	1.00	1.36	0.090	0.180	Direct HDL, Clearance method
	mg/dl	45.5	38.7	52.3	3.40	6.80	
	mmol/l	1.17	0.995	1.35	0.090	0.180	Direct HDL, Immunoseparation
	mg/dl	45.2	38.4	52.0	3.40	6.80	
	mmol/l	1.16	0.986	1.33	0.085	0.170	Direct HDL, PPD
	mg/dl	44.8	38.1	51.5	3.35	6.70	
Iron	µmol/l	18.2	14.9	21.5	1.65	3.30	Colorimetric without ppt.
	µg/dl	102	83.6	120	9.00	18.0	
Lactate	mmol/l	1.39	1.14	1.64	0.125	0.250	Colorimetric - Lactate oxidase
	mg/dl	12.5	10.3	14.7	1.10	2.20	
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC
	U/l	198	168	228	15.0	30.0	Lactate to Pyruvate methods
	U/l	201	171	231	15.0	30.0	Siemens Dimension L-P Non IFCC
Magnesium	mmol/l	0.879	0.774	0.984	0.053	0.105	Xylidyl Blue
	mg/dl	2.14	1.88	2.40	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.47	1.25	1.69	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.56	3.88	5.24	0.340	0.680	
Potassium	mmol/l	3.99	3.67	4.31	0.160	0.320	ISE method - indirect
Protein, Total	g/l	57.3	45.8	68.8	5.75	11.5	Biuret reaction, end point
	g/dl	5.73	4.58	6.88	0.575	1.15	
	g/l	56.8	45.4	68.2	5.70	11.4	Biuret reaction, kinetic
	g/dl	5.68	4.54	6.82	0.570	1.14	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	45.9	36.3	55.5	4.80	9.60	FE+UIBC(saturation with iron)
	µg/dl	257	203	311	27.0	54.0	
Triglycerides	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.0	108	7.55	15.1	
Urea	mmol/l	7.43	6.32	8.54	0.555	1.11	Urease, kinetic
	mg/dl	44.7	38.0	51.4	3.35	6.70	
	mg/dl	20.8	17.7	23.9	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.347	0.302	0.392	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.83	5.07	6.59	0.380	0.760	
	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.75	5.00	6.50	0.375	0.750	
	mmol/l	0.338	0.294	0.382	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.68	4.94	6.42	0.370	0.740	

Siemens Atellica Solution			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.3	34.3	46.3	3.00	6.00	Bromocresol Green
	g/dl	4.03	3.43	4.63	0.300	0.600	
	g/l	41.3	35.1	47.5	3.10	6.20	Bromocresol Purple
	g/dl	4.13	3.51	4.75	0.310	0.620	
Alkaline Phosphatase	U/l	161	137	185	12.0	24.0	AMP optimised to IFCC
	U/l	160	136	184	12.0	24.0	Siemens Dimension AMP buffer
ALT (GPT)	U/l	44	35	53	4.50	9.00	Siemens/Dade standard nonIFCC correlated
	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
Amylase, Pancreatic	U/l	65	55	75	5.00	10.0	Immunoinhibition, EPS substrate
	U/l	65	55	75	5.00	10.0	Roche liquid stable pNPG7
Amylase, Total	U/l	89	76	102	6.50	13.0	Siemens - blocked pNPG7
	U/l	88	75	101	6.50	13.0	Siemens 2-chloro-pNPG3
AST (GOT)	U/l	38	30	46	4.00	8.00	Siemens/Dade standard non IFCC corr.
	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Bicarbonate	mmol/l	15.5	12.3	18.7	1.60	3.20	Enzymatic
	mmol/l	15.0	11.9	18.1	1.55	3.10	PEP Carboxylase
Bile Acids	µmol/l	23.6	18.9	28.3	2.35	4.70	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.16	0.916	1.40	0.120	0.240	Oxidation to Biliverdin/Vanadate
	µmol/l	19.8	15.6	24.0	2.10	4.20	
Bilirubin, Total	mg/dl	1.90	1.50	2.30	0.200	0.400	Oxidation to Biliverdin/Vanadate
	µmol/l	32.5	25.7	39.3	3.40	6.80	
Calcium	mmol/l	2.16	1.94	2.38	0.110	0.220	Arsenazo III
	mg/dl	8.66	7.79	9.53	0.435	0.870	
	mmol/l	2.09	1.88	2.30	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.38	7.54	9.22	0.420	0.840	
Chloride	mmol/l	96.6	88.9	104	3.70	7.40	ISE, indirect
Cholesterol	mmol/l	4.26	3.71	4.81	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
	mmol/l	4.13	3.59	4.67	0.270	0.540	Cholesterol Oxidase - IDMS
	mg/dl	159	138	180	10.5	21.0	
	mmol/l	4.23	3.68	4.78	0.275	0.550	Siemens Dimension
	mg/dl	163	142	184	10.5	21.0	
Cholinesterase	U/l	7924	6339	9509	793	1585	Colorimetric - Butyrylthiocholine
CK, Total	U/l	211	173	249	19.0	38.0	CK-NAC (IFCC)
	U/l	212	174	250	19.0	38.0	Creatine phosphate substrate start
Creatinine	mg/dl	1.51	1.21	1.81	0.150	0.300	Alkaline picrate no deproteinisation
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.54	1.23	1.85	0.155	0.310	Alkaline picrate with deproteinisation
	µmol/l	136	109	163	13.5	27.0	

Siemens Atellica Solution			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)					
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28								
Size: 20 x 5ml / 5 x 5ml			Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method	
Creatinine	mg/dl	1.49	1.19	1.79	0.150	0.300	Creatinine PAP method	
	µmol/l	132	106	158	13.0	26.0		
	mg/dl	1.51	1.21	1.81	0.150	0.300	Enzymatic UV method	
	µmol/l	134	107	161	13.5	27.0		
	mg/dl	1.50	1.20	1.80	0.150	0.300	IDMS traceable	
	µmol/l	133	106	160	13.5	27.0		
	mg/dl	1.54	1.23	1.85	0.155	0.310	Jaffe rate blanked	
	µmol/l	136	109	163	13.5	27.0		
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)	
	µmol/l	135	108	162	13.5	27.0		
	Free T4	pmol/l	18.1	13.6	22.6	2.25	4.50	Siemens Atellica IM
		pg/ml	14.1	10.6	17.6	1.75	3.50	
		ng/dl	1.41	1.06	1.76	0.175	0.350	
	gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
U/l		54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)	
U/l		52	44	60	4.00	8.00	Siemens Dimension	
Glucose	mmol/l	6.20	5.27	7.13	0.465	0.930	Glucose oxidase	
	mg/dl	112	95.2	129	8.50	17.0		
	mmol/l	5.95	5.06	6.84	0.445	0.890	Hexokinase	
	mg/dl	107	91.0	123	8.00	16.0		
HDL-Cholesterol	mmol/l	1.52	1.29	1.75	0.115	0.230	Direct HDL, Clearance method	
	mg/dl	58.7	49.9	67.5	4.40	8.80		
	mmol/l	1.52	1.29	1.75	0.115	0.230	Direct HDL, Immunoseparation	
	mg/dl	58.7	49.9	67.5	4.40	8.80		
	mmol/l	1.50	1.28	1.72	0.110	0.220	HDL Ultra/Accel Selective Detergent	
	mg/dl	57.9	49.2	66.6	4.35	8.70		
Iron	µmol/l	18.7	15.3	22.1	1.70	3.40	Colorimetric with ppt.	
	µg/dl	105	86.1	124	9.50	19.0		
	µmol/l	18.5	15.2	21.8	1.65	3.30	Colorimetric without ppt.	
	µg/dl	103	84.5	122	9.50	19.0		
Lactate	mmol/l	1.43	1.17	1.69	0.130	0.260	Colorimetric - Lactate oxidase	
	mg/dl	12.9	10.6	15.2	1.15	2.30		
LD (LDH)	U/l	199	169	229	15.0	30.0	L to P IFCC	
	U/l	199	169	229	15.0	30.0	Lactate to Pyruvate methods	
	U/l	200	170	230	15.0	30.0	Siemens Dimension L-P Non IFCC	
Lithium	mmol/l	1.03	0.906	1.15	0.060	0.120	Spectrophotometric	
	mg/dl	0.715	0.629	0.801	0.043	0.086		
Magnesium	mmol/l	0.892	0.785	0.999	0.054	0.107	Methylthymol blue	
	mg/dl	2.17	1.91	2.43	0.130	0.260		

Siemens Atellica Solution			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Magnesium	mmol/l	0.886	0.780	0.992	0.053	0.106	Xylidyl Blue
	mg/dl	2.15	1.89	2.41	0.130	0.260	
Osmolality	mOsm/kg	292	234	350	29.0	58.0	Calculated
Phosphate, Inorganic	mmol/l	1.47	1.25	1.69	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.56	3.88	5.24	0.340	0.680	
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	ISE method - indirect
Protein, Total	g/l	57.8	46.2	69.4	5.80	11.6	Biuret reaction, end point
	g/dl	5.78	4.62	6.94	0.580	1.16	
	g/l	57.5	46.0	69.0	5.75	11.5	Biuret reaction, kinetic
	g/dl	5.75	4.60	6.90	0.575	1.15	
PSA, Total	ng/ml	8.99	6.74	11.2	1.11	2.21	Siemens Atellica IM
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone (TSH)	µU/ml	1.48	1.18	1.78	0.150	0.300	Siemens Atellica IM
TIBC	µmol/l	48.0	37.9	58.1	5.05	10.1	Direct Colorimetric
	µg/dl	268	212	324	28.0	56.0	
	µmol/l	47.5	37.5	57.5	5.00	10.0	FE+UIBC(saturation with iron)
	µg/dl	266	210	322	28.0	56.0	
Total T4	nmol/l	101	75.8	126	12.5	25.0	Siemens Atellica IM
	ng/ml	78.8	59.1	98.5	9.85	19.7	
	µg/dl	7.88	5.91	9.85	0.985	1.97	
Triglycerides	mmol/l	1.05	0.882	1.22	0.085	0.170	Lipase/GK UV. no correction
	mg/dl	92.9	78.0	108	7.55	15.1	
	mmol/l	1.08	0.907	1.25	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.3	111	7.70	15.4	
	mmol/l	1.10	0.924	1.28	0.090	0.180	Siemens Atellica IM
	mg/dl	97.4	81.8	113	7.80	15.6	
Urea	mmol/l	7.48	6.36	8.60	0.560	1.12	Urease, end point
	mg/dl	45.0	38.3	51.7	3.35	6.70	
	mg/dl (BUN)	21.0	17.9	24.1	1.55	3.10	
	mmol/l	7.46	6.34	8.58	0.560	1.12	Urease, hypochlorite
	mg/dl	44.8	38.1	51.5	3.35	6.70	
	mg/dl (BUN)	20.9	17.8	24.0	1.55	3.10	

Siemens Atellica Solution			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Urea	mmol/l	7.48	6.36	8.60	0.560	1.12	Urease, kinetic
	mg/dl	45.0	38.3	51.7	3.35	6.70	
	mg/dl (BUN)	21.0	17.9	24.1	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.75	5.00	6.50	0.375	0.750	
	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.339	0.295	0.383	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.70	4.96	6.44	0.370	0.740	
	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase, catalase 340nm.
	mg/dl	5.75	5.00	6.50	0.375	0.750	

Siemens AUTOPAK 300/300i

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.7	34.6	46.8	3.05	6.10	Bromocresol Green
	g/dl	4.07	3.46	4.68	0.305	0.610	
Protein, Total	g/l	56.3	45.0	67.6	5.65	11.3	Biuret reaction, end point
	g/dl	5.63	4.50	6.76	0.565	1.13	
Triglycerides	mmol/l	1.09	0.916	1.26	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	96.5	81.1	112	7.75	15.5	
Urea	mmol/l	7.26	6.17	8.35	0.545	1.09	Urease, kinetic
	mg/dl	43.6	37.1	50.1	3.25	6.50	
	mg/dl (BUN)	20.3	17.3	23.3	1.50	3.00	

Siemens Dimension EXL/200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.9	34.8	47.0	3.05	6.10	Bromocresol Green
	g/dl	4.09	3.48	4.70	0.305	0.610	
	g/l	41.5	35.3	47.7	3.10	6.20	Bromocresol Purple
	g/dl	4.15	3.53	4.77	0.310	0.620	
Alkaline Phosphatase	U/l	167	142	192	12.5	25.0	AMP optimised to IFCC
	U/l	164	139	189	12.5	25.0	Siemens Dimension AMP buffer
ALT (GPT)	U/l	47	38	56	4.50	9.00	Siemens/Dade standard nonIFCC correlated
	U/l	47	38	56	4.50	9.00	Tris buffer with P5P
Amylase, Total	U/l	82	70	94	6.00	12.0	Siemens 2-chloro-pNPG3
	U/l	83	71	95	6.00	12.0	Siemens/Dade maltopenta/hexaoside
AST (GOT)	U/l	48	38	58	5.00	10.0	Siemens/Dade standard non IFCC corr.
	U/l	48	38	58	5.00	10.0	Tris buffer with P5P
Bicarbonate	mmol/l	16.1	12.8	19.4	1.65	3.30	Enzymatic
	mmol/l	15.5	12.3	18.7	1.60	3.20	PEP Carboxylase
Bilirubin, Direct	mg/dl	0.807	0.638	0.976	0.085	0.169	Diazo with Sulphanilic Acid
	µmol/l	13.8	10.9	16.7	1.45	2.90	
	mg/dl	0.807	0.638	0.976	0.085	0.169	Diazo/ Sulphanilic Siemens Dimension
	µmol/l	13.8	10.9	16.7	1.45	2.90	
Bilirubin, Total	mg/dl	1.83	1.45	2.21	0.190	0.380	Diazo with Sulphanilic Acid
	µmol/l	31.3	24.7	37.9	3.30	6.60	
Calcium	mmol/l	2.05	1.85	2.25	0.100	0.200	Cresolphthalein complexone
	mg/dl	8.22	7.40	9.04	0.410	0.820	
Chloride	mmol/l	93.4	85.9	101	3.80	7.60	ISE, indirect
Cholesterol	mmol/l	3.77	3.28	4.26	0.245	0.490	Cholesterol Oxidase - Abell Kendall
	mg/dl	146	127	165	9.50	19.0	
	mmol/l	3.76	3.27	4.25	0.245	0.490	Siemens Dimension
	mg/dl	145	126	164	9.50	19.0	
Cholinesterase	U/l	10307	8246	12368	1031	2061	Colorimetric - Butyrythiochol. Dimension
CK, Total	U/l	207	170	244	18.5	37.0	CK-NAC (IFCC)
	U/l	206	169	243	18.5	37.0	Dithioerythritol (DTE), IFCC correlated
Creatinine	mg/dl	1.59	1.27	1.91	0.160	0.320	Alkaline picrate no deproteinisation
	µmol/l	141	113	169	14.0	28.0	
	mg/dl	1.56	1.25	1.87	0.155	0.310	Alkaline picrate with deproteinisation
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Creatinine PAP method
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Enzymatic UV method
	µmol/l	135	108	162	13.5	27.0	

Siemens Dimension EXL/200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Creatinine	mg/dl	1.55	1.24	1.86	0.155	0.310	IDMS traceable
	µmol/l	137	110	164	13.5	27.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked
	µmol/l	135	108	162	13.5	27.0	
Free T4	pmol/l	18.0	13.5	22.5	2.25	4.50	Siemens Dimension Exl LOCI
	pg/ml	14.0	10.5	17.5	1.75	3.50	
	ng/dl	1.40	1.05	1.75	0.175	0.350	
gamma-GT	U/l	59	50	68	4.50	9.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	68	58	78	5.00	10.0	Siemens Dimension
Glucose	mmol/l	6.24	5.30	7.18	0.470	0.940	Hexokinase
	mg/dl	112	95.2	129	8.50	17.0	
HDL-Cholesterol	mmol/l	1.44	1.22	1.66	0.110	0.220	Direct HDL, Clearance method
	mg/dl	55.6	47.3	63.9	4.15	8.30	
	mmol/l	1.39	1.18	1.60	0.105	0.210	Direct HDL, PEGME
	mg/dl	53.7	45.6	61.8	4.05	8.10	
	mmol/l	1.41	1.20	1.62	0.105	0.210	Direct HDL, PPD
	mg/dl	54.4	46.2	62.6	4.10	8.20	
mmol/l	1.34	1.14	1.54	0.100	0.200	HDL Ultra/Accel Selective Detergent	
	mg/dl	51.7	43.9	59.5	3.90		7.80
Iron	µmol/l	17.7	14.5	20.9	1.60	3.20	Colorimetric with ppt.
	µg/dl	98.9	81.1	117	9.05	18.1	
	µmol/l	17.5	14.4	20.6	1.55	3.10	Colorimetric without ppt.
	µg/dl	97.8	80.2	115	8.60	17.2	
Lactate	mmol/l	1.47	1.21	1.73	0.130	0.260	UV - LDH
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LD (LDH)	U/l	192	163	221	14.5	29.0	L to P IFCC
	U/l	195	166	224	14.5	29.0	Siemens Dimension L-P Non IFCC
Lipase	U/l	35	28	42	3.50	7.00	Colorimetric Dimension (LIP Kit)
	U/l	94	75	113	9.50	19.0	Colorimetric Dimension (LIPL Kit)
Magnesium	mmol/l	0.898	0.790	1.01	0.056	0.112	Methylthymol blue
	mg/dl	2.18	1.92	2.44	0.130	0.260	
Osmolality	mOsm/ kg	281	225	337	28.0	56.0	Calculated
Phosphate, Inorganic	mmol/l	1.56	1.33	1.79	0.115	0.230	Phosphomolybdate enzymatic
	mg/dl	4.84	4.11	5.57	0.365	0.730	
	mmol/l	1.53	1.30	1.76	0.115	0.230	Phosphomolybdate UV
	mg/dl	4.74	4.03	5.45	0.355	0.710	
Potassium	mmol/l	3.88	3.57	4.19	0.155	0.310	ISE method - indirect

Siemens Dimension EXL/200			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Protein, Total	g/l	60.2	48.2	72.2	6.00	12.0	Biuret reaction, end point
	g/dl	6.02	4.82	7.22	0.600	1.20	
PSA, Total	ng/ml	8.59	6.44	10.7	1.06	2.11	Siemens Dimension
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone (TSH)	µU/ml	1.35	1.08	1.62	0.135	0.270	Siemens Dimension Exl LOCI
TIBC	µmol/l	39.0	30.8	47.2	4.10	8.20	Direct Colorimetric
	µg/dl	218	172	264	23.0	46.0	
	µmol/l	38.7	30.6	46.8	4.05	8.10	FE+UIBC(saturation with iron)
	µg/dl	216	171	261	22.5	45.0	
	µmol/l	39.6	31.3	47.9	4.15	8.30	Removal of excess free iron
	µg/dl	221	175	267	23.0	46.0	
Triglycerides	mmol/l	0.948	0.796	1.10	0.076	0.152	Lipase/GK UV. no correction
	mg/dl	83.9	70.5	97.3	6.70	13.4	
	mmol/l	0.947	0.795	1.10	0.077	0.153	Lipase/Glycerol Dehydrogenase
	mg/dl	83.8	70.4	97.2	6.70	13.4	
	mmol/l	0.956	0.803	1.11	0.077	0.154	Lipase/GPO-PAP no correction
	mg/dl	84.6	71.1	98.1	6.75	13.5	
	mmol/l	0.961	0.807	1.12	0.080	0.159	Siemens Dimension
	mg/dl	85.0	71.4	98.6	6.80	13.6	
Urea	mmol/l	7.20	6.12	8.28	0.540	1.08	Urease, end point
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	
	mmol/l	7.27	6.18	8.36	0.545	1.09	Urease, kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mg/dl (BUN)	20.4	17.3	23.5	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase @ 293 nm
	mg/dl	5.75	5.00	6.50	0.375	0.750	
	mmol/l	0.341	0.297	0.385	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.73	4.99	6.47	0.370	0.740	
	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase, catalase 340nm.
	mg/dl	5.80	5.05	6.55	0.375	0.750	

Siemens Dimension RxL/Max/Xpand			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.1	35.8	48.4	3.15	6.30	Bromocresol Green
	g/dl	4.21	3.58	4.84	0.315	0.630	
	g/l	41.5	35.3	47.7	3.10	6.20	Bromocresol Purple
	g/dl	4.15	3.53	4.77	0.310	0.620	
Alkaline Phosphatase	U/l	167	142	192	12.5	25.0	AMP optimised to IFCC
	U/l	166	141	191	12.5	25.0	Siemens Dimension AMP buffer
ALT (GPT)	U/l	47	38	56	4.50	9.00	Siemens/Dade standard nonIFCC correlated
	U/l	47	38	56	4.50	9.00	Tris buffer with P5P
Amylase, Pancreatic	U/l	54	46	62	4.00	8.00	Immunoinhibition, EPS substrate
Amylase, Total	U/l	83	71	95	6.00	12.0	Siemens 2-chloro-pNPG3
AST (GOT)	U/l	48	38	58	5.00	10.0	Siemens/Dade standard non IFCC corr.
	U/l	49	39	59	5.00	10.0	Tris buffer with P5P
Bilirubin, Direct	mg/dl	0.790	0.624	0.956	0.083	0.166	Diazo/ Sulphanilic Siemens Dimension
	µmol/l	13.5	10.7	16.3	1.40	2.80	
Bilirubin, Total	mg/dl	1.82	1.44	2.20	0.190	0.380	Diazo with Sulphanilic Acid
	µmol/l	31.1	24.6	37.6	3.25	6.50	
Calcium	mmol/l	2.07	1.86	2.28	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.30	7.47	9.13	0.415	0.830	
Chloride	mmol/l	93.3	85.8	101	3.85	7.70	ISE, indirect
Cholesterol	mmol/l	3.84	3.34	4.34	0.250	0.500	Cholesterol Oxidase - Abell Kendall
	mg/dl	148	129	167	9.50	19.0	
	mmol/l	3.79	3.30	4.28	0.245	0.490	Siemens Dimension
	mg/dl	146	127	165	9.50	19.0	
CK, Total	U/l	209	171	247	19.0	38.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.56	1.25	1.87	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	138	110	166	14.0	28.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	Creatinine PAP method
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.51	1.21	1.81	0.150	0.300	IDMS traceable
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.57	1.26	1.88	0.155	0.310	Jaffe rate blanked
	µmol/l	139	111	167	14.0	28.0	
gamma-GT	U/l	60	51	69	4.50	9.00	Gamma glut`3-carb`4-nitro(IFCC)
	U/l	67	57	77	5.00	10.0	Siemens Dimension
Glucose	mmol/l	6.20	5.27	7.13	0.465	0.930	Hexokinase
	mg/dl	112	95.2	129	8.50	17.0	
HDL-Cholesterol	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, PEGME
	mg/dl	54.0	45.9	62.1	4.05	8.10	

Siemens Dimension RxL/Max/Xpand				HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)			
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.40	1.19	1.61	0.105	0.210	Direct HDL, PPD
	mg/dl	54.0	45.9	62.1	4.05	8.10	
Iron	µmol/l	17.5	14.4	20.6	1.55	3.10	Colorimetric with ppt.
	µg/dl	97.8	80.2	115	8.60	17.2	
	µmol/l	17.8	14.6	21.0	1.60	3.20	Colorimetric without ppt.
	µg/dl	99.5	81.6	117	8.75	17.5	
Lactate	mmol/l	1.47	1.21	1.73	0.130	0.260	UV - LDH
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LD (LDH)	U/l	195	166	224	14.5	29.0	L to P IFCC
Lipase	U/l	36	29	43	3.50	7.00	Colorimetric Dimension (LIP Kit)
Magnesium	mmol/l	0.899	0.791	1.01	0.056	0.111	Methylthymol blue
	mg/dl	2.18	1.92	2.44	0.130	0.260	
Phosphate, Inorganic	mmol/l	1.52	1.29	1.75	0.115	0.230	Phosphomolybdate enzymatic
	mg/dl	4.71	4.00	5.42	0.355	0.710	
	mmol/l	1.51	1.28	1.74	0.115	0.230	Phosphomolybdate UV
	mg/dl	4.68	3.98	5.38	0.350	0.700	
Potassium	mmol/l	3.90	3.59	4.21	0.155	0.310	ISE method - indirect
Protein, Total	g/l	60.1	48.1	72.1	6.00	12.0	Biuret reaction, end point
	g/dl	6.01	4.81	7.21	0.600	1.20	
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - indirect
TIBC	µmol/l	40.2	31.8	48.6	4.20	8.40	Direct Colorimetric
	µg/dl	225	178	272	23.5	47.0	
	µmol/l	38.3	30.3	46.3	4.00	8.00	FE+UIBC(saturation with iron)
	µg/dl	214	169	259	22.5	45.0	
	µmol/l	40.2	31.8	48.6	4.20	8.40	Removal of excess free iron
	µg/dl	225	178	272	23.5	47.0	
Triglycerides	mmol/l	1.01	0.848	1.17	0.080	0.160	Lipase/GK UV. no correction
	mg/dl	89.4	75.1	104	7.30	14.6	
	mmol/l	0.975	0.819	1.13	0.078	0.155	Lipase/Glycerol Dehydrogenase
	mg/dl	86.3	72.5	100	6.85	13.7	
	mmol/l	0.967	0.812	1.12	0.077	0.153	Lipase/GPO-PAP no correction
	mg/dl	85.6	71.9	99.3	6.85	13.7	
	mmol/l	0.967	0.812	1.12	0.077	0.153	Siemens Dimension
	mg/dl	85.6	71.9	99.3	6.85	13.7	
Urea	mmol/l	7.32	6.22	8.42	0.550	1.10	Urease, kinetic
	mg/dl	44.0	37.4	50.6	3.30	6.60	
	mg/dl	20.5	17.4	23.6	1.55	3.10	
	(BUN)						

Siemens Dimension RxL/Max/Xpand			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.342	0.298	0.386	0.022	0.044	Uricase @ 293 nm
	mg/dl	5.75	5.00	6.50	0.375	0.750	
	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.78	5.03	6.53	0.375	0.750	
	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase, catalase 340nm.
	mg/dl	5.78	5.03	6.53	0.375	0.750	

Siemens Immulite 1000			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.6	15.5	25.7	2.55	5.10	Siemens/DPC Immulite 1000
	pg/ml	16.1	12.1	20.1	2.00	4.00	
	ng/dl	1.61	1.21	2.01	0.200	0.400	
Thyroid Stimulating Hormone (TSH)	µU/ml	1.68	1.34	2.02	0.170	0.340	Siemens/DPC Immulite 1000

Siemens Immulite 2000/XPi			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	17.9	13.4	22.4	2.25	4.50	Siemens/DPC Immulite 2000/2500
	pg/ml	14.0	10.5	17.5	1.75	3.50	
	ng/dl	1.40	1.05	1.75	0.175	0.350	
PSA, Total	ng/ml	8.42	6.32	10.5	1.04	2.08	Siemens Immulite 2000/2500, Total PSA

SNIBE Bioassays/BC Analysers			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml		Range					
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.2	35.0	47.4	3.10	6.20	Bromocresol Green
	g/dl	4.12	3.50	4.74	0.310	0.620	
Alkaline Phosphatase	U/l	183	156	210	13.5	27.0	AMP optimised to IFCC
Amylase, Total	U/l	79	67	91	6.00	12.0	Randox Liquid Ethylidene pNPG7
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bile Acids	µmol/l	25.1	20.1	30.1	2.50	5.00	Enzymatic Colorimetric
Bilirubin, Direct	mg/dl	1.05	0.830	1.27	0.110	0.220	Oxidation to Biliverdin/Vanadate
	µmol/l	18.0	14.2	21.8	1.90	3.80	
Bilirubin, Total	mg/dl	1.92	1.52	2.32	0.200	0.400	Oxidation to Biliverdin/Vanadate
	µmol/l	32.8	25.9	39.7	3.45	6.90	
Calcium	mmol/l	2.13	1.92	2.34	0.105	0.210	Cresolphthalein complexone
	mg/dl	8.54	7.69	9.39	0.425	0.850	
Chloride	mmol/l	94.7	87.1	102	3.65	7.30	ISE, direct
Cholesterol	mmol/l	4.25	3.70	4.80	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
Cholinesterase	U/l	6119	4895	7343	612	1224	Colorimetric - Butyrylthiocholine
CK, Total	U/l	228	187	269	20.5	41.0	CK-NAC substrate start (DGKC)
Creatinine	mg/dl	1.50	1.20	1.80	0.150	0.300	Creatinine PAP method
	µmol/l	133	106	160	13.5	27.0	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.22	5.29	7.15	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
	mmol/l	6.11	5.19	7.03	0.460	0.920	Hexokinase
	mg/dl	110	93.5	127	8.50	17.0	
HBDH	U/l	198	156	240	21.0	42.0	Oxobutyrate < 10 mmol/l
HDL-Cholesterol	mmol/l	1.30	1.11	1.49	0.095	0.190	Direct HDL, PPD
	mg/dl	50.2	42.7	57.7	3.75	7.50	
Iron	µmol/l	18.3	15.0	21.6	1.65	3.30	Colorimetric without ppt.
	µg/dl	102	83.6	120	9.00	18.0	
Lactate	mmol/l	1.56	1.28	1.84	0.140	0.280	Colorimetric - Lactate oxidase
	mg/dl	14.1	11.6	16.6	1.25	2.50	
LD (LDH)	U/l	198	168	228	15.0	30.0	L to P IFCC
Magnesium	mmol/l	0.926	0.815	1.04	0.057	0.114	Xylidyl Blue
	mg/dl	2.25	1.98	2.52	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.41	1.20	1.62	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.37	3.71	5.03	0.330	0.660	
Potassium	mmol/l	3.94	3.62	4.26	0.160	0.320	ISE method - direct

SNIBE Bioassays/BC Analysers			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Protein, Total	g/l	58.2	46.6	69.8	5.80	11.6	Biuret reaction, end point
	g/dl	5.82	4.66	6.98	0.580	1.16	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
TIBC	µmol/l	41.7	32.9	50.5	4.40	8.80	FE+UIBC(saturation with iron)
	µg/dl	233	184	282	24.5	49.0	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/Glycerol Dehydrogenase
	mg/dl	92.0	77.3	107	7.50	15.0	
	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.22	6.14	8.30	0.540	1.08	Urease, kinetic
	mg/dl	43.4	36.9	49.9	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.351	0.305	0.397	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	5.90	5.13	6.67	0.385	0.770	
	mmol/l	0.335	0.291	0.379	0.022	0.044	Uricase Perox. with ascorb. ox
	mg/dl	5.63	4.90	6.36	0.365	0.730	

SNIBE Maglumi analysers			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	20.2	15.2	25.2	2.50	5.00	SNIBE Maglumi analysers
	pg/ml	15.8	11.9	19.7	1.95	3.90	
	ng/dl	1.58	1.19	1.97	0.195	0.390	
PSA, Total	ng/ml	8.61	6.46	10.8	1.10	2.19	SNIBE Maglumi analysers
Thyroid Stimulating Hormone (TSH)	µU/ml	1.51	1.21	1.81	0.150	0.300	SNIBE Maglumi analysers

Spinreact Spin120/200E/640/ Tech240

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	43.9	37.3	50.5	3.30	6.60	Bromocresol Green
	g/dl	4.39	3.73	5.05	0.330	0.660	
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Calcium	mmol/l	2.26	2.03	2.49	0.115	0.230	Arsenazo III
	mg/dl	9.06	8.15	9.97	0.455	0.910	
Cholesterol	mmol/l	4.16	3.62	4.70	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Glucose	mmol/l	6.52	5.54	7.50	0.490	0.980	Glucose oxidase
	mg/dl	117	99.5	135	9.00	18.0	
Magnesium	mmol/l	0.985	0.867	1.10	0.058	0.115	Xylidyl Blue
	mg/dl	2.39	2.10	2.68	0.145	0.290	
Phosphate, Inorganic	mmol/l	1.70	1.45	1.95	0.125	0.250	Phosphomolybdate UV
	mg/dl	5.27	4.48	6.06	0.395	0.790	
Triglycerides	mmol/l	1.06	0.890	1.23	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	93.8	78.8	109	7.60	15.2	
Urea	mmol/l	7.38	6.27	8.49	0.555	1.11	Urease, kinetic
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	

Starlyte III/V Electrolyte Analyzer			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Potassium	mmol/l	3.69	3.39	3.99	0.150	0.300	ISE method - direct

Sysmex BX-3010/4000			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.2	35.0	47.4	3.10	6.20	Bromocresol Green
	g/dl	4.12	3.50	4.74	0.310	0.620	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.14	0.901	1.38	0.120	0.240	Diazo with Dichloroaniline
	µmol/l	19.5	15.4	23.6	2.05	4.10	
Calcium	mmol/l	2.10	1.89	2.31	0.105	0.210	Phosphonazo
	mg/dl	8.42	7.58	9.26	0.420	0.840	
Cholesterol	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	164	143	185	10.5	21.0	
Creatinine	mg/dl	1.57	1.26	1.88	0.155	0.310	Alkaline picrate no deproteinisation
	µmol/l	139	111	167	14.0	28.0	
Glucose	mmol/l	5.90	5.02	6.78	0.440	0.880	Glucose oxidase
	mg/dl	106	90.1	122	8.00	16.0	
	mmol/l	6.05	5.14	6.96	0.455	0.910	Hexokinase
	mg/dl	109	92.7	125	8.00	16.0	
HDL-Cholesterol	mmol/l	1.20	1.02	1.38	0.090	0.180	Direct HDL, Clearance method
	mg/dl	46.3	39.4	53.2	3.45	6.90	
	mmol/l	1.27	1.08	1.46	0.095	0.190	Direct HDL, Immunoseparation
	mg/dl	49.0	41.7	56.3	3.65	7.30	
Phosphate, Inorganic	mmol/l	1.46	1.24	1.68	0.110	0.220	Phosphomolybdate UV
	mg/dl	4.53	3.85	5.21	0.340	0.680	
Protein, Total	g/l	60.4	48.3	72.5	6.05	12.1	Biuret reaction, end point
	g/dl	6.04	4.83	7.25	0.605	1.21	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.23	6.15	8.31	0.540	1.08	Urease, kinetic
	mg/dl	43.5	37.0	50.0	3.25	6.50	
	mg/dl	20.3	17.3	23.3	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.347	0.302	0.392	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.83	5.07	6.59	0.380	0.760	
	mmol/l	0.358	0.311	0.405	0.024	0.047	Uricase Perox. with ascorb. ox
	mg/dl	6.01	5.23	6.79	0.390	0.780	
	mmol/l	0.334	0.291	0.377	0.022	0.043	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.61	4.88	6.34	0.365	0.730	

Teco Matrix			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.300	0.600	
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.16	0.916	1.40	0.120	0.240	Diazo with Sulphanilic Acid
	µmol/l	19.8	15.6	24.0	2.10	4.20	
Cholesterol	mmol/l	4.14	3.60	4.68	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	139	181	10.5	21.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
	mg/dl	1.45	1.16	1.74	0.145	0.290	Jaffe rate blanked
	µmol/l	128	102	154	13.0	26.0	
Glucose	mmol/l	6.12	5.20	7.04	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.16	0.986	1.33	0.085	0.170	Direct HDL, PEGME
	mg/dl	44.8	38.1	51.5	3.35	6.70	
Protein, Total	g/l	57.2	45.8	68.6	5.70	11.4	Biuret reaction, end point
	g/dl	5.72	4.58	6.86	0.570	1.14	
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.14	6.07	8.21	0.535	1.07	Urease, kinetic
	mg/dl	42.9	36.5	49.3	3.20	6.40	
	mg/dl	20.0	17.0	23.0	1.50	3.00	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.344	0.299	0.389	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.78	5.03	6.53	0.375	0.750	
	mmol/l	0.355	0.309	0.401	0.023	0.046	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.96	5.19	6.73	0.385	0.770	

Teco TC-84/-3300			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
ALT (GPT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P
Cholesterol	mmol/l	4.33	3.77	4.89	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	167	145	189	11.0	22.0	
Glucose	mmol/l	6.22	5.29	7.15	0.465	0.930	Glucose oxidase
	mg/dl	112	95.2	129	8.50	17.0	
Urea	mmol/l	7.37	6.26	8.48	0.555	1.11	Urease, kinetic
	mg/dl	44.3	37.7	50.9	3.30	6.60	
	mg/dl (BUN)	20.6	17.5	23.7	1.55	3.10	

Thermo Konelab 20/30/60/Indiko			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.3	33.4	45.2	2.95	5.90	Bromocresol Green
	g/dl	3.93	3.34	4.52	0.295	0.590	
Alkaline Phosphatase	U/l	178	151	205	13.5	27.0	AMP optimised to IFCC
ALT (GPT)	U/l	45	36	54	4.50	9.00	Colorimetric
	U/l	43	34	52	4.50	9.00	Tris buffer without P5P
Amylase, Total	U/l	80	68	92	6.00	12.0	Human CNPG3 (IFCC)
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.06	0.837	1.28	0.110	0.220	Diazo with Dichloroaniline
	µmol/l	18.1	14.3	21.9	1.90	3.80	
	mg/dl	1.09	0.861	1.32	0.115	0.230	Diazo with Sulphanilic Acid
	µmol/l	18.7	14.8	22.6	1.95	3.90	
	mg/dl	1.08	0.853	1.31	0.115	0.230	Dichlorophenyl Diazonium
	µmol/l	18.5	14.6	22.4	1.95	3.90	
Calcium	mmol/l	2.15	1.94	2.36	0.105	0.210	Arsenazo III
	mg/dl	8.62	7.76	9.48	0.430	0.860	
Chloride	mmol/l	98.0	90.2	106	4.00	8.00	ISE, direct
Cholesterol	mmol/l	4.27	3.71	4.83	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	165	144	186	10.5	21.0	
	mmol/l	4.27	3.71	4.83	0.280	0.560	Cholesterol Oxidase - IDMS
	mg/dl	165	144	186	10.5	21.0	
CK, Total	U/l	226	185	267	20.5	41.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.60	1.28	1.92	0.160	0.320	Alkaline picrate no deproteinisation
	µmol/l	142	114	170	14.0	28.0	
	mg/dl	1.53	1.22	1.84	0.155	0.310	Creatinine PAP method
	µmol/l	135	108	162	13.5	27.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Enzymatic UV method
	µmol/l	133	106	160	13.5	27.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate blanked
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.59	1.27	1.91	0.160	0.320	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	141	113	169	14.0	28.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.09	5.18	7.00	0.455	0.910	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
	mmol/l	5.98	5.08	6.88	0.450	0.900	Hexokinase
	mg/dl	108	91.8	124	8.00	16.0	
HDL-Cholesterol	mmol/l	1.31	1.11	1.51	0.100	0.200	Direct HDL, Clearance method
	mg/dl	50.6	43.0	58.2	3.80	7.60	

Thermo Konelab 20/30/60/Indiko			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
HDL-Cholesterol	mmol/l	1.34	1.14	1.54	0.100	0.200	Direct HDL, PEGME
	mg/dl	51.7	43.9	59.5	3.90	7.80	
	mmol/l	1.22	1.04	1.40	0.090	0.180	Direct HDL, PPD
	mg/dl	47.1	40.0	54.2	3.55	7.10	
Iron	µmol/l	21.1	17.3	24.9	1.90	3.80	Colorimetric without ppt.
	µg/dl	118	96.8	139	10.5	21.0	
LD (LDH)	U/l	204	173	235	15.5	31.0	L to P IFCC
Magnesium	mmol/l	0.917	0.807	1.03	0.057	0.113	Xylidyl Blue
	mg/dl	2.23	1.96	2.50	0.135	0.270	
Phosphate, Inorganic	mmol/l	1.43	1.22	1.64	0.105	0.210	Phosphomolybdate UV
	mg/dl	4.43	3.77	5.09	0.330	0.660	
Potassium	mmol/l	3.89	3.58	4.20	0.155	0.310	ISE method - direct
Protein, Total	g/l	58.1	46.5	69.7	5.80	11.6	Biuret reaction, end point
	g/dl	5.81	4.65	6.97	0.580	1.16	
	g/l	59.0	47.2	70.8	5.90	11.8	Biuret reaction, kinetic
	g/dl	5.90	4.72	7.08	0.590	1.18	
Sodium	mmol/l	137	130	144	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.04	0.874	1.21	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.50	15.0	
Urea	mmol/l	7.39	6.28	8.50	0.555	1.11	Urease, end point
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	
	mmol/l	7.40	6.29	8.51	0.555	1.11	Urease, kinetic
	mg/dl	44.5	37.8	51.2	3.35	6.70	
	mg/dl (BUN)	20.7	17.6	23.8	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.338	0.294	0.382	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.68	4.94	6.42	0.370	0.740	
	mmol/l	0.345	0.300	0.390	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.80	5.05	6.55	0.375	0.750	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.71	4.97	6.45	0.370	0.740	

Tokyo Boeki Biolis 30i			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.2	35.9	48.5	3.15	6.30	Agappe - Bromocresol Green
	g/dl	4.22	3.59	4.85	0.315	0.630	
	g/l	42.1	35.8	48.4	3.15	6.30	Bromocresol Green
	g/dl	4.21	3.58	4.84	0.315	0.630	
Alkaline Phosphatase	U/l	239	203	275	18.0	36.0	Agappe - DGKC-SCE
ALT (GPT)	U/l	40	32	48	4.00	8.00	Agappe - IFCC
	U/l	41	33	49	4.00	8.00	Tris buffer without P5P
Amylase, Total	U/l	68	58	78	5.00	10.0	Agappe - CNPG3
Bilirubin, Direct	mg/dl	0.690	0.545	0.835	0.073	0.145	Agappe - DIAZO
	µmol/l	11.8	9.32	14.3	1.25	2.50	
Chloride	mmol/l	88.4	81.3	95.5	3.55	7.10	Agappe - THIOCYANATE
Cholesterol	mmol/l	4.10	3.57	4.63	0.265	0.530	Agappe - CHOD-PAP
	mg/dl	158	137	179	10.5	21.0	
	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
	mmol/l	4.24	3.69	4.79	0.275	0.550	Cholesterol Oxidase - IDMS
	mg/dl	164	143	185	10.5	21.0	
CK, Total	U/l	219	180	258	19.5	39.0	Agappe - IFCC/KINETIC
Creatinine	mg/dl	1.51	1.21	1.81	0.150	0.300	Agappe - JAFFE'S KINETIC
	µmol/l	134	107	161	13.5	27.0	
	mg/dl	1.44	1.15	1.73	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	127	102	152	12.5	25.0	
	mg/dl	1.47	1.18	1.76	0.145	0.290	Jaffe rate blanked
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	U/l	58	49	67	4.50	9.00	Agappe - SZASZ KINETIC
Glucose	mmol/l	5.97	5.07	6.87	0.450	0.900	Agappe - GOD-PAP
	mg/dl	108	91.8	124	8.00	16.0	
	mmol/l	6.41	5.45	7.37	0.480	0.960	Glucose oxidase
	mg/dl	116	98.6	133	8.50	17.0	
	mmol/l	6.23	5.30	7.16	0.465	0.930	Hexokinase
	mg/dl	112	95.2	129	8.50	17.0	
HDL-Cholesterol	mmol/l	1.25	1.06	1.44	0.095	0.190	Agappe - SELECTIVE INHIBITION
	mg/dl	48.3	41.1	55.5	3.60	7.20	
Iron	µmol/l	19.5	16.0	23.0	1.75	3.50	Agappe - CHROMAZUROL
	µg/dl	109	89.4	129	10.0	20.0	
LD (LDH)	U/l	407	346	468	30.5	61.0	Agappe - SCE
Magnesium	mmol/l	0.917	0.807	1.03	0.057	0.113	Agappe - XYLIDYL BLUE
	mg/dl	2.23	1.96	2.50	0.135	0.270	

Tokyo Boeki Biolis 30i			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Phosphate, Inorganic	mmol/l	1.57	1.33	1.81	0.120	0.240	Agappe - PHOSPOHMOLYBDATE
	mg/dl	4.87	4.14	5.60	0.365	0.730	
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	Agappe - ISE DIRECT
Protein, Total	g/l	57.8	46.2	69.4	5.80	11.6	Agappe - BIURET
	g/dl	5.78	4.62	6.94	0.580	1.16	
	g/l	58.1	46.5	69.7	5.80	11.6	Biuret reaction, end point
	g/dl	5.81	4.65	6.97	0.580	1.16	
Sodium	mmol/l	136	129	143	3.50	7.00	Agappe - ISE DIRECT
Triglycerides	mmol/l	0.954	0.801	1.11	0.078	0.156	Agappe - GPO - TOPS
	mg/dl	84.4	70.9	97.9	6.75	13.5	
	mmol/l	1.09	0.916	1.26	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	96.5	81.1	112	7.75	15.5	
Urea	mmol/l	6.80	5.78	7.82	0.510	1.02	Agappe - UREASE GLDH
	mg/dl	40.9	34.8	47.0	3.05	6.10	
	mg/dl (BUN)	19.0	16.2	21.8	1.40	2.80	
	mmol/l	7.35	6.25	8.45	0.550	1.10	Urease, kinetic
	mg/dl	44.2	37.6	50.8	3.30	6.60	
	mg/dl (BUN)	20.6	17.5	23.7	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.373	0.325	0.421	0.024	0.048	Agappe - URICASE - PAP
	mg/dl	6.27	5.45	7.09	0.410	0.820	
	mmol/l	0.353	0.307	0.399	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	5.93	5.16	6.70	0.385	0.770	
	mmol/l	0.340	0.296	0.384	0.022	0.044	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.71	4.97	6.45	0.370	0.740	

Tokyo Boeki Biolis 50i			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	40.4	34.3	46.5	3.05	6.10	Bromocresol Green
	g/dl	4.04	3.43	4.65	0.305	0.610	
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Bilirubin, Direct	mg/dl	1.12	0.885	1.36	0.120	0.240	Dichlorophenyl Diazonium
	µmol/l	19.1	15.1	23.1	2.00	4.00	
	mg/dl	1.02	0.806	1.23	0.105	0.210	Oxidation to Biliverdin/Vanadate
	µmol/l	17.4	13.7	21.1	1.85	3.70	
Calcium	mmol/l	2.16	1.94	2.38	0.110	0.220	Arsenazo III
	mg/dl	8.66	7.79	9.53	0.435	0.870	
Cholesterol	mmol/l	4.21	3.66	4.76	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	142	184	10.5	21.0	
CK, Total	U/l	234	192	276	21.0	42.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.45	1.16	1.74	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	128	102	154	13.0	26.0	
	mg/dl	1.48	1.18	1.78	0.150	0.300	Jaffe rate blanked
	µmol/l	131	105	157	13.0	26.0	
	mg/dl	1.55	1.24	1.86	0.155	0.310	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	137	110	164	13.5	27.0	
gamma-GT	U/l	55	47	63	4.00	8.00	Gamma glut.-3-carb.-4-nitro.
	U/l	51	43	59	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.15	5.23	7.07	0.460	0.920	Glucose oxidase
	mg/dl	111	94.4	128	8.50	17.0	
HDL-Cholesterol	mmol/l	1.33	1.13	1.53	0.100	0.200	Direct HDL, Clearance method
	mg/dl	51.3	43.6	59.0	3.85	7.70	
	mmol/l	1.17	0.995	1.35	0.090	0.180	Direct HDL, Immunoseparation
	mg/dl	45.2	38.4	52.0	3.40	6.80	
Protein, Total	g/l	58.4	46.7	70.1	5.85	11.7	Biuret reaction, end point
	g/dl	5.84	4.67	7.01	0.585	1.17	
Triglycerides	mmol/l	1.03	0.865	1.20	0.085	0.170	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.40	14.8	
Urea	mmol/l	7.27	6.18	8.36	0.545	1.09	Urease, kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mg/dl	20.4	17.3	23.5	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.356	0.310	0.402	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	5.98	5.20	6.76	0.390	0.780	
	mmol/l	0.343	0.298	0.388	0.023	0.045	Uricase Perox. with ascorb. ox
	mg/dl	5.76	5.01	6.51	0.375	0.750	

Tokyo Boeki Biolis 50i			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Uric Acid (Urate)	mmol/l	0.323	0.281	0.365	0.021	0.042	Uricase Perox. with ascorb. ox @ 546nm
	mg/dl	5.43	4.72	6.14	0.355	0.710	

Tokyo Boeki/Biolis/Prestige 24i/TMS 1024

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28

Size: 20 x 5ml / 5 x 5ml

Range

Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	41.0	34.9	47.1	3.05	6.10	Bromocresol Green
	g/dl	4.10	3.49	4.71	0.305	0.610	
Calcium	mmol/l	2.23	2.01	2.45	0.110	0.220	Arsenazo III
	mg/dl	8.94	8.05	9.83	0.445	0.890	
Cholesterol	mmol/l	4.31	3.75	4.87	0.280	0.560	Cholesterol Oxidase - Abell Kendall
	mg/dl	166	144	188	11.0	22.0	
Creatinine	mg/dl	1.44	1.15	1.73	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	127	102	152	12.5	25.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Jaffe rate blanked
	µmol/l	133	106	160	13.5	27.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.17	5.24	7.10	0.465	0.930	Agappe - GOD-PAP
	mg/dl	111	94.4	128	8.50	17.0	
	mmol/l	6.26	5.32	7.20	0.470	0.940	Glucose oxidase
	mg/dl	113	96.1	130	8.50	17.0	
Protein, Total	g/l	58.2	46.6	69.8	5.80	11.6	Biuret reaction, end point
	g/dl	5.82	4.66	6.98	0.580	1.16	
Triglycerides	mmol/l	1.11	0.932	1.29	0.090	0.180	Lipase/GPO-PAP no correction
	mg/dl	98.2	82.5	114	7.90	15.8	
Urea	mmol/l	7.27	6.18	8.36	0.545	1.09	Urease, kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mg/dl	20.4	17.3	23.5	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.355	0.309	0.401	0.023	0.046	Uricase perox. no ascorb. ox.
	mg/dl	5.96	5.19	6.73	0.385	0.770	

Toshiba FR Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	45.5	38.7	52.3	3.40	6.80	Agappe - Bromocresol Green
	g/dl	4.55	3.87	5.23	0.340	0.680	
Alkaline Phosphatase	U/l	243	207	279	18.0	36.0	Agappe - DGKC-SCE
ALT (GPT)	U/l	42	34	50	4.00	8.00	Agappe - IFCC
Amylase, Total	U/l	70	60	80	5.00	10.0	Agappe - CNPG3
AST (GOT)	U/l	35	28	42	3.50	7.00	Agappe - IFCC
Bilirubin, Direct	mg/dl	0.608	0.480	0.736	0.064	0.128	Agappe - DIAZO
	µmol/l	10.4	8.22	12.6	1.10	2.20	
Chloride	mmol/l	90.8	83.5	98.1	3.65	7.30	Agappe - THIOCYANATE
Cholesterol	mmol/l	4.05	3.52	4.58	0.265	0.530	Agappe - CHOD-PAP
	mg/dl	156	136	176	10.0	20.0	
CK, Total	U/l	226	185	267	20.5	41.0	Agappe - IFCC/KINETIC
Creatinine	mg/dl	1.45	1.16	1.74	0.145	0.290	Agappe - ENZYMATIC
	µmol/l	128	102	154	13.0	26.0	
	mg/dl	1.50	1.20	1.80	0.150	0.300	Agappe - JAFFE'S KINETIC
	µmol/l	133	106	160	13.5	27.0	
gamma-GT	U/l	58	49	67	4.50	9.00	Agappe - SZASZ KINETIC
Glucose	mmol/l	6.07	5.16	6.98	0.455	0.910	Agappe - GOD-PAP
	mg/dl	109	92.7	125	8.00	16.0	
HDL-Cholesterol	mmol/l	1.36	1.16	1.56	0.100	0.200	Agappe - SELECTIVE INHIBITION
	mg/dl	52.5	44.6	60.4	3.95	7.90	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Agappe - CHROMAZUROL
	µg/dl	107	87.7	126	9.50	19.0	
LD (LDH)	U/l	413	351	475	31.0	62.0	Agappe - SCE
Magnesium	mmol/l	0.969	0.853	1.09	0.061	0.121	Agappe - XYLIDYL BLUE
	mg/dl	2.35	2.07	2.63	0.140	0.280	
Phosphate, Inorganic	mmol/l	1.54	1.31	1.77	0.115	0.230	Agappe - PHOSPOHMOLYBDATE
	mg/dl	4.77	4.05	5.49	0.360	0.720	
Protein, Total	g/l	59.5	47.6	71.4	5.95	11.9	Agappe - BIURET
	g/dl	5.95	4.76	7.14	0.595	1.19	
Triglycerides	mmol/l	0.934	0.785	1.08	0.073	0.146	Agappe - GPO - TOPS
	mg/dl	82.7	69.5	95.9	6.60	13.2	
Urea	mmol/l	7.33	6.23	8.43	0.550	1.10	Agappe - UREASE GLDH
	mg/dl	44.1	37.5	50.7	3.30	6.60	
	mg/dl	20.5	17.4	23.6	1.55	3.10	
	(BUN)						
Uric Acid (Urate)	mmol/l	0.368	0.320	0.416	0.024	0.048	Agappe - URICASE - PAP
	mg/dl	6.18	5.38	6.98	0.400	0.800	

Tosoh AIA Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Free T4	pmol/l	21.7	16.3	27.1	2.70	5.40	Tosoh AIA Series
	pg/ml	16.9	12.7	21.1	2.10	4.20	
	ng/dl	1.69	1.27	2.11	0.210	0.420	

TurboChem 100			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	42.8	36.4	49.2	3.20	6.40	Bromocresol Green
	g/dl	4.28	3.64	4.92	0.320	0.640	
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P

UDICHEM 240 Plus			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	38.8	33.0	44.6	2.90	5.80	Bromocresol Green
	g/dl	3.88	3.30	4.46	0.290	0.580	
Cholesterol	mmol/l	4.11	3.58	4.64	0.265	0.530	Cholesterol Oxidase - IDMS
	mg/dl	159	138	180	10.5	21.0	
Creatinine	mg/dl	1.53	1.22	1.84	0.155	0.310	Jaffe rate blanked
	μmol/l	135	108	162	13.5	27.0	
Uric Acid (Urate)	mmol/l	0.333	0.290	0.376	0.022	0.043	Uricase @ 293 nm
	mg/dl	5.59	4.86	6.32	0.365	0.730	

URIT 800 Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P
Glucose	mmol/l	5.97	5.07	6.87	0.450	0.900	Glucose oxidase
	mg/dl	108	91.8	124	8.00	16.0	

URIT 8000 Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.4	33.5	45.3	2.95	5.90	Bromocresol Green
	g/dl	3.94	3.35	4.53	0.295	0.590	
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P
Calcium	mmol/l	2.10	1.89	2.31	0.105	0.210	Arsenazo III
	mg/dl	8.42	7.58	9.26	0.420	0.840	
Cholesterol	mmol/l	4.16	3.62	4.70	0.270	0.540	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	140	182	10.5	21.0	
Creatinine	mg/dl	1.47	1.18	1.76	0.145	0.290	Alkaline picrate no deproteinisation
	µmol/l	130	104	156	13.0	26.0	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glut`3-carb`4-nitro(IFCC)
Glucose	mmol/l	6.08	5.17	6.99	0.455	0.910	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
Protein, Total	g/l	60.3	48.2	72.4	6.05	12.1	Biuret reaction, end point
	g/dl	6.03	4.82	7.24	0.605	1.21	
Triglycerides	mmol/l	0.998	0.838	1.16	0.081	0.162	Lipase/GPO-PAP no correction
	mg/dl	88.3	74.2	102	6.85	13.7	
Urea	mmol/l	7.22	6.14	8.30	0.540	1.08	Urease, kinetic
	mg/dl	43.4	36.9	49.9	3.25	6.50	
	mg/dl (BUN)	20.2	17.2	23.2	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.338	0.294	0.382	0.022	0.044	Uricase perox. no ascorb. ox.
	mg/dl	5.68	4.94	6.42	0.370	0.740	

Wiener Lab CMD Series			HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)				
Lot. No: 1687UN Cat. No: HN1530 / HS2611 Expiry: 2027-10-28							
Size: 20 x 5ml / 5 x 5ml			Range				
Analyte	Unit	Target	Low	High	1SD	2SD	Method
Albumin	g/l	39.3	33.4	45.2	2.95	5.90	Bromocresol Green
	g/dl	3.93	3.34	4.52	0.295	0.590	
Alkaline Phosphatase	U/l	276	235	317	20.5	41.0	Diethanolamine buffer, DEA
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P
Calcium	mmol/l	2.17	1.95	2.39	0.110	0.220	Arsenazo III
	mg/dl	8.70	7.83	9.57	0.435	0.870	
Cholesterol	mmol/l	4.20	3.65	4.75	0.275	0.550	Cholesterol Oxidase - Abell Kendall
	mg/dl	162	141	183	10.5	21.0	
CK, Total	U/l	218	179	257	19.5	39.0	CK-NAC (IFCC)
Creatinine	mg/dl	1.66	1.33	1.99	0.165	0.330	Jaffe rate blanked comp. (-26µmol/l)
	µmol/l	147	118	176	14.5	29.0	
Glucose	mmol/l	6.13	5.21	7.05	0.460	0.920	Glucose oxidase
	mg/dl	110	93.5	127	8.50	17.0	
HDL-Cholesterol	mmol/l	1.29	1.10	1.48	0.095	0.190	Direct HDL, PPD
	mg/dl	49.8	42.3	57.3	3.75	7.50	
LD (LDH)	U/l	385	327	443	29.0	58.0	P to L SFBC / SEQC
Phosphate, Inorganic	mmol/l	1.78	1.51	2.05	0.135	0.270	Phosphomolybdate UV
	mg/dl	5.52	4.69	6.35	0.415	0.830	
Potassium	mmol/l	3.82	3.51	4.13	0.155	0.310	ISE method - direct
Protein, Total	g/l	61.2	49.0	73.4	6.10	12.2	Biuret reaction, end point
	g/dl	6.12	4.90	7.34	0.610	1.22	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.00	0.840	1.16	0.080	0.160	Lipase/GPO-PAP no correction
	mg/dl	88.5	74.3	103	7.25	14.5	
Urea	mmol/l	7.61	6.47	8.75	0.570	1.14	Urease, kinetic
	mg/dl	45.7	38.8	52.6	3.45	6.90	
	mg/dl (BUN)	21.3	18.1	24.5	1.60	3.20	
Uric Acid (Urate)	mmol/l	0.349	0.304	0.394	0.023	0.045	Uricase perox. no ascorb. ox.
	mg/dl	5.86	5.10	6.62	0.380	0.760	