RANDOX 0843 CE

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

CAT. NO. HN1530 / HS2611 **LOT NO.** 917UN
SIZE: 20 x 5 ml / 5 x 5 ml **EXPIRY:** 2018-04

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 -20°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 (25 - 30 µl) of 0.7M Acetic acid solution to 1 ml 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 -20°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.
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.
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 -20°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.

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

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

MATERIALS REQUIRED BUT NOT PROVIDED
Volumetric pipette

ASSIGNED VALUES

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 ±2S.D. This results in an assayed serum with extremely accurate values, which may be confidently used by laboratories to ensure the accuracy of their methods.

If an instrument specific value is not available, refer to the Mean of all Instruments 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.

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ABBOTT AEROSET®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.5	33.5	45.5	3.00	6.00	Bromocresol Green
	g/dl	3.95	3.35	4.55	0.30	0.60	
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	19.0	15.0	23.0	2.00	4.00	Diazo with Dichloroaniline (DCA)
	mg/dl	1.11	0.878	1.34	0.12	0.23	
Bilirubin Total	µmol/l	27.8	21.9	33.7	2.95	5.90	Diazo with Dichloroaniline (DCA)
	mg/dl	1.63	1.28	1.98	0.18	0.35	
	µmol/l	28.9	22.8	35.0	3.05	6.10	Diazo with Sulphanilic Acid
	mg/dl	1.69	1.33	2.05	0.18	0.36	
Calcium	mmol/l	2.30	2.07	2.53	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.22	8.30	10.1	0.46	0.92	
	mmol/l	2.25	2.02	2.48	0.12	0.23	Arsenazo III
	mg/dl	9.02	8.10	9.94	0.46	0.92	
Cholesterol	mmol/l	4.42	3.84	5.00	0.29	0.58	Cholesterol Oxidase
	mg/dl	171	148	194	11.50	23.00	
Chloride	mmol/l	101	93.0	109	4.00	8.00	ISE direct
CK Total	U/l	213	174	252	19.50	39.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	111	88.6	133	11.20	22.40	Alkaline picrate no deproteinization
	mg/dl	1.25	1.00	1.50	0.13	0.25	
Glucose	mmol/l	6.28	5.34	7.22	0.47	0.94	Hexokinase
	mg/dl	113	96.2	130	8.40	16.80	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Glucose	mmol/l	6.44	5.47	7.41	0.49	0.97	Glucose oxidase
	mg/dl	116	98.6	133	8.70	17.40	
HDL - Cholesterol	mmol/l	1.41	1.20	1.62	0.11	0.21	HDL - Ultra
	mg/dl	54.4	46.3	62.5	4.05	8.10	
Iron	µmol/l	19.0	15.6	22.4	1.70	3.40	Colorimetric without ppt.
	µg/dl	106	87.2	125	9.40	18.80	
LD (LDH)	U/l	213	181	245	16.00	32.00	L->P IFCC 37°C
Phosphate Inorganic	mmol/l	1.37	1.17	1.57	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.25	3.63	4.87	0.31	0.62	
Potassium	mmol/l	3.83	3.52	4.14	0.16	0.31	ISE method - direct
Protein Total	g/l	60.9	48.7	73.1	6.10	12.20	Biuret reaction end point
	g/dl	6.09	4.87	7.31	0.61	1.22	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.06	0.89	1.23	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	93.8	78.4	109	7.70	15.40	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.81	5.06	6.56	0.38	0.75	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.80	5.04	6.56	0.38	0.76	
Urea	mmol/l	7.12	6.05	8.19	0.54	1.07	Urease kinetic
	mg/dl	42.8	36.4	49.2	3.20	6.40	
	mmol/l	6.97	5.93	8.01	0.52	1.04	Urease hypochlorite
	mg/dl	41.9	35.6	48.2	3.15	6.30	
	mmol/l	7.12	6.05	8.19	0.54	1.07	BUN
	mg/dl	20.0	17.0	23.0	1.50	3.00	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	38.7	32.9	44.5	2.90	5.80	Bromocresol Green
	g/dl	3.87	3.29	4.45	0.29	0.58	
	g/l	38.7	32.9	44.5	2.90	5.80	Bromocresol Purple
	g/dl	3.87	3.29	4.45	0.29	0.58	
Alkaline Phosphatase	U/l	166	141	191	12.50	25.00	AMP optimised to IFCC 37°C
	U/l	164	140	188	12.00	24.00	AMP non-optimised 37°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	59	50	68	4.50	9.00	Immunoinhibition EPS substrate 37°C
AST (GOT)	U/l	37	29	45	4.00	8.00	Tris buffer without P5P 37°C
Bile Acids	µmol/l	26.3	21.0	31.6	2.65	5.30	Enzymatic Colorimetric
Bicarbonate	mmol/l	12.6	9.99	15.2	1.31	2.61	Enzymatic
Bilirubin Direct	µmol/l	20.8	16.4	25.2	2.20	4.40	Diazo with Dichloroaniline (DCA)
	mg/dl	1.22	0.959	1.48	0.13	0.26	
Bilirubin Total	µmol/l	28.2	22.3	34.1	2.95	5.90	Diazo with Dichloroaniline (DCA)
	mg/dl	1.65	1.30	2.00	0.18	0.35	
	µmol/l	29.0	22.9	35.1	3.05	6.10	Diazo with Sulphanilic Acid
	mg/dl	1.70	1.34	2.06	0.18	0.36	
	µmol/l	28.2	22.3	34.1	2.95	5.90	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.65	1.30	2.00	0.18	0.35	
	µmol/l	28.3	22.4	34.2	2.95	5.90	Diazonium ion
	mg/dl	1.66	1.31	2.01	0.18	0.35	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.21	1.99	2.43	0.11	0.22	Arsenazo III
	mg/dl	8.86	7.98	9.74	0.44	0.88	
Cholesterol	mmol/l	4.35	3.79	4.91	0.28	0.56	Cholesterol Oxidase
	mg/dl	168	146	190	11.00	22.00	
Chloride	mmol/l	101	92.7	109	4.15	8.30	ISE indirect
CK Total	U/l	192	158	226	17.00	34.00	CK-NAC substrate start (DGKC) 37°C
	U/l	189	155	223	17.00	34.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	124	99.0	149	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	132	105	159	13.50	27.00	Randox Enzymatic UV method
	mg/dl	1.49	1.19	1.79	0.15	0.30	
	µmol/l	125	100	150	12.50	25.00	Jaffe rate blanked
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	122	97.9	146	12.05	24.10	IDMS traceable
	mg/dl	1.38	1.11	1.65	0.14	0.27	
Free T4	pmol/l	15.3	11.5	19.1	1.90	3.80	Abbott Architect
	ng/dl	1.19	0.897	1.48	0.15	0.29	
	pg/ml	11.9	8.97	14.8	1.47	2.93	Abbott Architect
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	52	44	60	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	47	40	54	3.50	7.00	DCL gamma glutamyl-3-carboxy-4-nitroanilide 37°C
Glucose	mmol/l	6.02	5.12	6.92	0.45	0.90	Hexokinase
	mg/dl	108	92.3	124	7.85	15.70	
	mmol/l	5.98	5.08	6.88	0.45	0.90	Glucose oxidase
	mg/dl	108	91.5	125	8.25	16.50	

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Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

Analyte	unit	target	Range low	Range high	1SD	2SD	methods
HDL - Cholesterol	mmol/l	1.40	1.19	1.61	0.11	0.21	Direct HDL PPD
	mg/dl	54.0	45.9	62.1	4.05	8.10	
	mmol/l	1.42	1.21	1.63	0.11	0.21	Direct Clearance Method
	mg/dl	54.8	46.7	62.9	4.05	8.10	
	mmol/l	1.42	1.21	1.63	0.11	0.21	HDL - Ultra
	mg/dl	54.8	46.7	62.9	4.05	8.10	
Iron	µmol/l	19.6	16.1	23.1	1.75	3.50	Colorimetric with ppt.
	µg/dl	110	90.0	130	10.00	20.00	
	µmol/l	19.8	16.2	23.4	1.80	3.60	Colorimetric without ppt.
	µg/dl	111	90.6	131	10.20	20.40	
Lactate	mmol/l	1.49	1.22	1.76	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.4	11.0	15.8	1.20	2.40	
LD (LDH)	U/l	223	190	256	16.50	33.00	L->P 37°C
	U/l	227	193	261	17.00	34.00	L->P IFCC 37°C
Lipase	U/l	34	27	41	3.50	7.00	Other Colorimetric 37°C
Lithium	mmol/l	0.96	0.85	1.08	0.06	0.12	Spectrophotometric
	mg/dl	0.667	0.587	0.747	0.04	0.08	
Magnesium	mmol/l	0.85	0.75	0.95	0.05	0.10	Arsenazo III
	mg/dl	2.06	1.81	2.31	0.13	0.25	
	mmol/l	0.85	0.75	0.95	0.05	0.10	Enzymatic
	mg/dl	2.06	1.82	2.30	0.12	0.24	
Phosphate Inorganic	mmol/l	1.35	1.15	1.55	0.10	0.20	Phosphomolybdate enzymatic
	mg/dl	4.19	3.57	4.81	0.31	0.62	
	mmol/l	1.35	1.15	1.55	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.19	3.57	4.81	0.31	0.62	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Potassium	mmol/l	3.88	3.57	4.19	0.16	0.31	ISE method - indirect
Protein Total	g/l	60.8	48.7	72.9	6.05	12.10	Biuret reaction end point
	g/dl	6.08	4.87	7.29	0.61	1.21	
	g/l	61.0	48.8	73.2	6.10	12.20	Biuret reaction kinetic
	g/dl	6.10	4.88	7.32	0.61	1.22	
PSA Total	ng/ml =	15.7	11.8	19.6	1.95	3.90	Abbott Architect
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone	µU/ml =	1.35	1.08	1.62	0.14	0.27	Abbott Architect
TIBC	µmol/l	49.8	39.4	60.2	5.20	10.40	FE+UIBC(saturation with iron)
	µg/dl	278	220	336	29.00	58.00	
Triglycerides	mmol/l	1.00	0.84	1.16	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	88.1	74.1	102	7.00	14.00	
	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	89.4	75.3	104	7.05	14.10	
	mmol/l	0.99	0.83	1.15	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	87.7	73.7	102	7.00	14.00	
	mmol/l	1.00	0.84	1.16	0.08	0.16	Lipase/Glycerol Dehydrogenase
	mg/dl	88.5	74.3	103	7.10	14.20	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.73	4.97	6.49	0.38	0.76	
	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.75	4.99	6.51	0.38	0.76	
	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.71	4.97	6.45	0.37	0.74	
Urea	mmol/l	6.98	5.94	8.02	0.52	1.04	Urease end point
	mg/dl	41.9	35.7	48.1	3.10	6.20	

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Analyte	unit	target	Range low	Range high	1SD	2SD	methods
Urea	mmol/l	7.01	5.96	8.06	0.53	1.05	Urease kinetic
	mg/dl	42.1	35.8	48.4	3.15	6.30	
	mmol/l	7.01	5.96	8.06	0.53	1.05	BUN
	mg/dl	19.7	16.7	22.7	1.50	3.00	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.2	33.3	45.1	2.95	5.90	Bromocresol Green
	g/dl	3.92	3.33	4.51	0.30	0.59	
Alkaline Phosphatase	U/l	173	147	199	13.00	26.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	39	32	46	3.50	7.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	22.8	18.0	27.6	2.40	4.80	Diazo with Dichloroaniline (DCA)
	mg/dl	1.33	1.05	1.61	0.14	0.28	
Bilirubin Total	µmol/l	31.7	25.1	38.3	3.30	6.60	Diazo with Dichloroaniline (DCA)
	mg/dl	1.85	1.47	2.23	0.19	0.38	
Calcium	mmol/l	2.22	2.00	2.44	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.90	8.02	9.78	0.44	0.88	
Cholesterol	mmol/l	4.36	3.79	4.93	0.29	0.57	Cholesterol Oxidase
	mg/dl	168	146	190	11.00	22.00	
CK Total	U/l	188	155	221	16.50	33.00	CK-NAC (IFCC) 37°C
Glucose	mmol/l	6.11	5.19	7.03	0.46	0.92	Hexokinase
	mg/dl	110	93.5	127	8.25	16.50	
	mmol/l	6.10	5.19	7.01	0.46	0.91	Glucose oxidase
	mg/dl	110	93.5	127	8.25	16.50	
Iron	µmol/l	19.2	15.8	22.6	1.70	3.40	Colorimetric without ppt.
	µg/dl	107	88.3	126	9.35	18.70	
Magnesium	mmol/l	0.90	0.79	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.18	1.92	2.44	0.13	0.26	

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Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Phosphate Inorganic	mmol/l	1.58	1.34	1.82	0.12	0.24	Phosphomolybdate UV
	mg/dl	4.90	4.15	5.65	0.38	0.75	
Potassium	mmol/l	3.88	3.57	4.19	0.16	0.31	ISE method - direct
Protein Total	g/l	61.8	49.4	74.2	6.20	12.40	Biuret reaction end point
	g/dl	6.18	4.94	7.42	0.62	1.24	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.04	0.87	1.21	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.1	107	7.45	14.90	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.36	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.41	4.70	6.12	0.36	0.71	
Urea	mmol/l	7.10	6.03	8.17	0.54	1.07	Urease kinetic
	mg/dl	42.7	36.2	49.2	3.25	6.50	
	mmol/l	7.10	6.04	8.16	0.53	1.06	BUN
	mg/dl	19.9	16.9	22.9	1.50	3.00	

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Beckman Coulter AU Series®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	38.5	32.7	44.3	2.90	5.80	Bromocresol Green
	g/dl	3.85	3.27	4.43	0.29	0.58	
	g/l	40.3	34.3	46.3	3.00	6.00	Bromocresol Purple
	g/dl	4.03	3.43	4.63	0.30	0.60	
Alkaline Phosphatase	U/l	201	171	231	15.00	30.00	p-Nitrophenylphosphate AMP 37°C
	U/l	295	250	340	22.50	45.00	Diethanolamine buffer DEA 37°C
	U/l	200	170	230	15.00	30.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
Amylase Total	U/l	87	74	100	6.50	13.00	Roche liquid stable pNPG7 37°C
	U/l	89	75	103	7.00	14.00	Beckman Coulter - blocked pNPG7 37°C
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	13.8	10.9	16.7	1.45	2.90	Enzymatic
Bilirubin Direct	µmol/l	21.9	17.3	26.5	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.28	1.01	1.55	0.14	0.27	
Bilirubin Total	µmol/l	30.8	24.3	37.3	3.25	6.50	Diazo with Sulphanilic Acid
	mg/dl	1.80	1.42	2.18	0.19	0.38	
	µmol/l	32.7	25.9	39.5	3.40	6.80	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.91	1.52	2.30	0.20	0.39	
	µmol/l	32.0	25.3	38.7	3.35	6.70	Oxidation to Biliverdin
	mg/dl	1.87	1.48	2.26	0.20	0.39	
Calcium	mmol/l	2.21	1.99	2.43	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.86	7.98	9.74	0.44	0.88	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.24	2.02	2.46	0.11	0.22	Arsenazo III
	mg/dl	8.98	8.10	9.86	0.44	0.88	
Cholesterol	mmol/l	4.35	3.79	4.91	0.28	0.56	Cholesterol Oxidase
	mg/dl	168	146	190	11.00	22.00	
Chloride	mmol/l	99.1	91.2	107	3.95	7.90	ISE indirect
Cholinesterase	U/l	6743	5394	8092	674.50	1349.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	201	164	238	18.50	37.00	CK-NAC substrate start (DGKC) 37°C
	U/l	204	167	241	18.50	37.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	129	103	155	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.46	1.16	1.76	0.15	0.30	
	µmol/l	123	98.7	147	12.15	24.30	Randox Enzymatic UV method
	mg/dl	1.39	1.12	1.66	0.14	0.27	
	µmol/l	123	98.2	148	12.40	24.80	Creatinine PAP method
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	µmol/l	130	104	156	13.00	26.00	Roche Creatinine Plus
	mg/dl	1.47	1.18	1.76	0.15	0.29	
	µmol/l	128	102	154	13.00	26.00	Jaffe rate blanked
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	126	100	152	13.00	26.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.42	1.13	1.71	0.15	0.29	
	µmol/l	115	92.1	138	11.45	22.90	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.30	1.04	1.56	0.13	0.26	
	µmol/l	116	92.9	139	11.55	23.10	IDMS traceable
	mg/dl	1.31	1.05	1.57	0.13	0.26	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
D-3-Hydroxybutyrate	mmol/l	0.30	0.25	0.34	0.02	0.04	Tris buffer 100mmol pH 8.5
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
GLDH	U/l	16	13	19	1.50	3.00	Triethanolamine buffer 50 mmol 37°C
Glucose	mmol/l	6.18	5.26	7.10	0.46	0.92	Hexokinase
	mg/dl	111	94.8	127	8.10	16.20	
	mmol/l	6.28	5.34	7.22	0.47	0.94	Glucose oxidase
	mg/dl	113	96.2	130	8.40	16.80	
HDL - Cholesterol	mmol/l	1.23	1.04	1.42	0.10	0.19	Direct HDL Immunoseparation
	mg/dl	47.5	40.1	54.9	3.70	7.40	
	mmol/l	1.22	1.04	1.40	0.09	0.18	Direct Clearance Method
	mg/dl	47.1	40.1	54.1	3.50	7.00	
	mmol/l	1.18	1.00	1.36	0.09	0.18	Direct HDL Roche 3rd generation
	mg/dl	45.5	38.6	52.4	3.45	6.90	
Iron	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric with ppt.
	µg/dl	108	88.3	128	9.85	19.70	
	µmol/l	19.8	16.2	23.4	1.80	3.60	Colorimetric without ppt.
	µg/dl	111	90.6	131	10.20	20.40	
Lactate	mmol/l	1.42	1.17	1.67	0.13	0.25	Colorimetric Lactate Oxidase
	mg/dl	12.8	10.5	15.1	1.15	2.30	
LD (LDH)	U/l	230	195	265	17.50	35.00	L->P 37°C
	U/l	497	422	572	37.50	75.00	P->L Scandinavian & Dutch 37°C
	U/l	230	195	265	17.50	35.00	L->P IFCC 37°C
Lipase	U/l	32	26	38	3.00	6.00	Other Colorimetric 37°C
	U/l	36	29	43	3.50	7.00	Roche Colorimetric 37°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Lipase	U/l	43	35	51	4.00	8.00	Randox Colorimetric 37°C
Lithium	mmol/l	0.91	0.80	1.02	0.05	0.11	Spectrophotometric
	mg/dl	0.631	0.555	0.707	0.04	0.08	
Magnesium	mmol/l	0.88	0.78	0.99	0.05	0.11	Xylidyl Blue
	mg/dl	2.15	1.89	2.41	0.13	0.26	
Osmolality	mOsm/kg	293	234	352	29.50	59.00	Calculated
Phosphate Inorganic	mmol/l	1.41	1.20	1.62	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.37	3.72	5.02	0.33	0.65	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.90	3.58	4.22	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.5	47.6	71.4	5.95	11.90	Biuret reaction end point
	g/dl	5.95	4.76	7.14	0.60	1.19	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	51.3	40.5	62.1	5.40	10.80	FE+UIBC(saturation with iron)
	µg/dl	287	226	348	30.50	61.00	
Triglycerides	mmol/l	1.05	0.88	1.22	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.1	108	7.40	14.80	
	mmol/l	1.03	0.86	1.20	0.08	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	91.2	76.3	106	7.45	14.90	
	mmol/l	1.04	0.87	1.21	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	92.0	77.3	107	7.35	14.70	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	5.01	6.51	0.38	0.75	
	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.76	5.01	6.51	0.38	0.75	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.66	4.92	6.40	0.37	0.74	
Urea	mmol/l	7.18	6.10	8.26	0.54	1.08	Urease end point
	mg/dl	43.2	36.7	49.7	3.25	6.50	
	mmol/l	7.17	6.09	8.25	0.54	1.08	Urease kinetic
	mg/dl	43.1	36.6	49.6	3.25	6.50	
	mmol/l	7.17	6.09	8.25	0.54	1.08	BUN
	mg/dl	20.1	17.1	23.1	1.50	3.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.31	0.61	
	g/l	40.3	34.3	46.3	3.00	6.00	Bromocresol Purple
	g/dl	4.03	3.43	4.63	0.30	0.60	
Alkaline Phosphatase	U/l	179	152	206	13.50	27.00	p-Nitrophenylphosphate AMP 37°C
	U/l	183	156	210	13.50	27.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	36	29	43	3.50	7.00	Tris buffer SCE 37°C
Amylase Pancreatic	U/l	53	45	61	4.00	8.00	Immunoinhibition EPS substrate 37°C
	U/l	55	47	63	4.00	8.00	Beckman Synchron/CX/LXi/DxC 37°C
Amylase Total	U/l	93	79	107	7.00	14.00	Beckman maltotetraose 37°C
	U/l	92	78	106	7.00	14.00	Beckman Synchron AMY7 37°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	37	30	44	3.50	7.00	Tris buffer SCE 37°C
Bile Acids	µmol/l	25.4	20.3	30.5	2.55	5.10	Enzymatic Colorimetric
Bicarbonate	mmol/l	13.6	10.8	16.4	1.40	2.80	Differential rate pH change
	mmol/l	13.7	10.9	16.5	1.40	2.80	Ion selective electrode
Bilirubin Direct	µmol/l	15.6	12.3	18.9	1.65	3.30	Diazo with Sulphanilic Acid
	mg/dl	0.913	0.720	1.11	0.10	0.19	
Bilirubin Total	µmol/l	32.1	25.4	38.8	3.35	6.70	Diazo with Sulphanilic Acid
	mg/dl	1.88	1.49	2.27	0.20	0.39	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.16	1.94	2.38	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.66	7.78	9.54	0.44	0.88	
	mmol/l	2.19	1.97	2.41	0.11	0.22	Ion selective electrode
	mg/dl	8.78	7.90	9.66	0.44	0.88	
	mmol/l	2.27	2.04	2.50	0.12	0.23	Arsenazo III
	mg/dl	9.10	8.18	10.0	0.46	0.92	
	mmol/l	2.15	1.93	2.37	0.11	0.22	NM-BAPTA
	mg/dl	8.62	7.74	9.50	0.44	0.88	
Cholesterol	mmol/l	4.01	3.49	4.53	0.26	0.52	Cholesterol Oxidase
	mg/dl	155	135	175	10.00	20.00	
Chloride	mmol/l	100	92.5	108	3.75	7.50	ISE indirect
Cholinesterase	U/l	6935	5548	8322	693.50	1387.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	200	164	236	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	198	162	234	18.00	36.00	Monothioglycerol 37°C
Creatinine	µmol/l	120	96.3	144	11.85	23.70	Alkaline picrate no deproteinization
	mg/dl	1.36	1.09	1.63	0.14	0.27	
	µmol/l	122	97.3	147	12.35	24.70	Randox Enzymatic UV method
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	µmol/l	121	96.5	146	12.25	24.50	Jaffe rate blanked
	mg/dl	1.37	1.09	1.65	0.14	0.28	
	µmol/l	117	93.7	140	11.65	23.30	IDMS traceable
	mg/dl	1.32	1.06	1.58	0.13	0.26	
gamma-GT	U/l	43	37	49	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	43	37	49	3.00	6.00	Gamma glutamyl-4-nitroanilide 37°C
	U/l	43	37	49	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C

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Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Glucose	mmol/l	6.06	5.15	6.97	0.46	0.91	Hexokinase
	mg/dl	109	92.8	125	8.10	16.20	
	mmol/l	6.00	5.10	6.90	0.45	0.90	Oxygen electrode
	mg/dl	108	91.9	124	8.05	16.10	
	mmol/l	5.97	5.08	6.86	0.45	0.89	Glucose oxidase
	mg/dl	108	91.5	125	8.25	16.50	
HDL - Cholesterol	mmol/l	1.43	1.22	1.64	0.11	0.21	Direct HDL PPD
	mg/dl	55.2	47.1	63.3	4.05	8.10	
Iron	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.3	128	9.85	19.70	
Lactate	mmol/l	1.54	1.26	1.82	0.14	0.28	Colorimetric Lactate Oxidase
	mg/dl	13.9	11.4	16.4	1.25	2.50	
LD (LDH)	U/l	186	159	213	13.50	27.00	L->P 37°C
	U/l	587	499	675	44.00	88.00	Pyruvate 1.4 mM - Beckman LD-P 37°C
	U/l	225	192	258	16.50	33.00	L->P IFCC 37°C
Lithium	mmol/l	0.91	0.80	1.02	0.06	0.11	Spectrophotometric
	mg/dl	0.634	0.558	0.710	0.04	0.08	
Magnesium	mmol/l	0.89	0.78	1.00	0.05	0.11	Calmagite
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Osmolality	mOsm/kg	285	228	342	28.50	57.00	Calculated
Phosphate Inorganic	mmol/l	1.37	1.16	1.58	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.25	3.60	4.90	0.33	0.65	
	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.28	3.63	4.93	0.33	0.65	
Potassium	mmol/l	3.85	3.54	4.16	0.16	0.31	ISE method - indirect

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Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Protein Total	g/l	60.3	48.2	72.4	6.05	12.10	Biuret reaction CX4/5/7
	g/dl	6.03	4.82	7.24	0.61	1.21	
	g/l	60.4	48.3	72.5	6.05	12.10	Biuret reaction end point
	g/dl	6.04	4.83	7.25	0.61	1.21	
	g/l	58.1	46.5	69.7	5.80	11.60	Biuret reaction kinetic
	g/dl	5.81	4.65	6.97	0.58	1.16	
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
TIBC	µmol/l	50.0	39.5	60.5	5.25	10.50	Removal of excess free iron
	µg/dl	280	221	339	29.50	59.00	
	µmol/l	55.2	43.6	66.8	5.80	11.60	FE+UIBC(saturation with iron)
	µg/dl	309	244	374	32.50	65.00	
Triglycerides	mmol/l	1.07	0.90	1.24	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	94.7	79.3	110	7.70	15.40	
	mmol/l	1.06	0.89	1.23	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	93.8	79.0	109	7.40	14.80	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.36	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.41	4.70	6.12	0.36	0.71	
Urea	mmol/l	7.31	6.21	8.41	0.55	1.10	Urease end point
	mg/dl	43.9	37.3	50.5	3.30	6.60	
	mmol/l	7.27	6.18	8.36	0.55	1.09	Urease kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mmol/l	7.27	6.18	8.36	0.55	1.09	BUN
	mg/dl	20.4	17.3	23.5	1.55	3.10	

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BIOSYSTEMS A15

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	35.7	30.3	41.1	2.70	5.40	Bromocresol Green
	g/dl	3.57	3.03	4.11	0.27	0.54	
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	44	35	53	4.50	9.00	Tris buffer without P5P 37°C
	U/l	30	24	36	3.00	6.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	33.7	26.6	40.8	3.55	7.10	Diazo with Sulphanilic Acid
	mg/dl	1.97	1.56	2.38	0.21	0.41	
Cholesterol	mmol/l	4.31	3.75	4.87	0.28	0.56	Cholesterol Oxidase
	mg/dl	166	145	187	10.50	21.00	
Creatinine	µmol/l	123	98.1	148	12.45	24.90	Alkaline picrate no deproteinization
	mg/dl	1.39	1.11	1.67	0.14	0.28	
Glucose	mmol/l	6.34	5.39	7.29	0.48	0.95	Glucose oxidase
	mg/dl	114	97.1	131	8.45	16.90	
HDL - Cholesterol	mmol/l	1.41	1.20	1.62	0.11	0.21	Direct Clearance Method
	mg/dl	54.4	46.3	62.5	4.05	8.10	
Protein Total	g/l	59.4	47.5	71.3	5.95	11.90	Biuret reaction end point
	g/dl	5.94	4.75	7.13	0.60	1.19	
Uric Acid (Urate)	mmol/l	0.38	0.33	0.43	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	6.40	5.58	7.22	0.41	0.82	

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BIOSYSTEMS A15

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Urea	mmol/l	7.11	6.04	8.18	0.54	1.07	Urease kinetic
	mg/dl	42.7	36.3	49.1	3.20	6.40	
	mmol/l	7.11	6.04	8.18	0.54	1.07	BUN
	mg/dl	20.0	17.0	23.0	1.50	3.00	

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BIOSYSTEMS A25

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	36.6	31.1	42.1	2.75	5.50	Bromocresol Green
	g/dl	3.66	3.11	4.21	0.28	0.55	
Alkaline Phosphatase	U/l	164	139	189	12.50	25.00	AMP optimised to IFCC 37°C
	U/l	128	108	148	10.00	20.00	AMP optimised to IFCC 30°C
	U/l	105	89	121	8.00	16.00	AMP optimised to IFCC 25°C
AST (GOT)	U/l	42	33	51	4.50	9.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	34.6	27.3	41.9	3.65	7.30	Diazo with Sulphanilic Acid
	mg/dl	2.02	1.60	2.44	0.21	0.42	
Cholesterol	mmol/l	4.49	3.90	5.08	0.30	0.59	Cholesterol Oxidase
	mg/dl	173	151	195	11.00	22.00	
Creatinine	µmol/l	120	95.6	144	12.20	24.40	Alkaline picrate no deproteinization
	mg/dl	1.36	1.08	1.64	0.14	0.28	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	35	49	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.32	5.38	7.26	0.47	0.94	Glucose oxidase
	mg/dl	114	96.9	131	8.55	17.10	
LD (LDH)	U/l	486	413	559	36.50	73.00	P->L Scandinavian & Dutch 37°C
	U/l	351	298	404	26.50	53.00	P->L Scandinavian & Dutch 30°C
	U/l	246	209	283	18.50	37.00	P->L Scandinavian & Dutch 25°C

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BIOSYSTEMS A25

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Protein Total	g/l	60.3	48.2	72.4	6.05	12.10	Biuret reaction end point
	g/dl	6.03	4.82	7.24	0.61	1.21	
Triglycerides	mmol/l	1.00	0.84	1.16	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	88.1	74.1	102	7.00	14.00	
Uric Acid (Urate)	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.91	5.14	6.68	0.39	0.77	
	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.93	5.16	6.70	0.39	0.77	
Urea	mmol/l	7.11	6.05	8.17	0.53	1.06	Urease kinetic
	mg/dl	42.7	36.4	49.0	3.15	6.30	
	mmol/l	7.11	6.04	8.18	0.54	1.07	BUN
	mg/dl	20.0	17.0	23.0	1.50	3.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.7	34.6	46.8	3.05	6.10	Bromocresol Green
	g/dl	4.07	3.46	4.68	0.31	0.61	
Alkaline Phosphatase	U/l	136	116	156	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	106	90	122	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	87	74	100	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	63	54	72	4.50	9.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	89	76	102	6.50	13.00	Saccharogenic 37°C
	U/l	89	76	102	6.50	13.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	89	75	103	7.00	14.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	20	28	2.00	4.00	Tris buffer without P5P 30°C
	U/l	17	14	20	1.50	3.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.8	11.0	16.6	1.40	2.80	Enzymatic
Bilirubin Direct	µmol/l	21.7	17.1	26.3	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.27	1.00	1.54	0.14	0.27	
	µmol/l	21.1	16.6	25.6	2.25	4.50	Diazo with Sulphanilic Acid
	mg/dl	1.23	0.971	1.49	0.13	0.26	
Bilirubin Total	µmol/l	28.7	22.7	34.7	3.00	6.00	Diazo with Dichloroaniline (DCA)
	mg/dl	1.68	1.33	2.03	0.18	0.35	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bilirubin Total	µmol/l	27.9	22.1	33.7	2.90	5.80	Diazo with Sulphanilic Acid
	mg/dl	1.63	1.29	1.97	0.17	0.34	
	µmol/l	27.6	21.8	33.4	2.90	5.80	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.61	1.28	1.94	0.17	0.33	
	µmol/l	28.0	22.1	33.9	2.95	5.90	Diazonium ion
	mg/dl	1.64	1.29	1.99	0.18	0.35	
Calcium	mmol/l	2.22	2.00	2.44	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.90	8.02	9.78	0.44	0.88	
	mmol/l	2.21	1.99	2.43	0.11	0.22	NM-BAPTA
	mg/dl	8.86	7.98	9.74	0.44	0.88	
Cholesterol	mmol/l	4.41	3.83	4.99	0.29	0.58	Cholesterol Oxidase
	mg/dl	170	148	192	11.00	22.00	
Chloride	mmol/l	98.7	90.8	107	3.95	7.90	ISE indirect
CK Total	U/l	203	167	239	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	127	105	149	11.00	22.00	CK-NAC (IFCC) 30°C
	U/l	86	71	101	7.50	15.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	116	93.1	139	11.45	22.90	Alkaline picrate with deproteinization
	mg/dl	1.31	1.05	1.57	0.13	0.26	
	µmol/l	114	91.3	137	11.35	22.70	Alkaline picrate no deproteinization
	mg/dl	1.29	1.03	1.55	0.13	0.26	
	µmol/l	117	93.5	141	11.75	23.50	Roche Creatinine Plus
	mg/dl	1.32	1.06	1.58	0.13	0.26	
	µmol/l	118	94.3	142	11.85	23.70	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.33	1.07	1.59	0.13	0.26	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	117	93.5	141	11.75	23.50	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.32	1.06	1.58	0.13	0.26	
gamma-GT	U/l	48	41	55	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	32	44	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	25	35	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	43	36	50	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	5.98	5.09	6.87	0.45	0.89	Glucose dehydrogenase
	mg/dl	108	91.7	124	8.15	16.30	
	mmol/l	6.16	5.23	7.09	0.47	0.93	Hexokinase
	mg/dl	111	94.2	128	8.40	16.80	
	mmol/l	6.31	5.36	7.26	0.48	0.95	Glucose oxidase
	mg/dl	114	96.6	131	8.70	17.40	
HDL - Cholesterol	mmol/l	1.26	1.07	1.45	0.10	0.19	Direct HDL PEGME
	mg/dl	48.6	41.3	55.9	3.65	7.30	
	mmol/l	1.22	1.03	1.41	0.10	0.19	Direct HDL Roche 3rd generation
	mg/dl	47.1	39.8	54.4	3.65	7.30	
Iron	µmol/l	20.9	17.1	24.7	1.90	3.80	Colorimetric with ppt.
	µg/dl	117	95.6	138	10.70	21.40	
	µmol/l	20.5	16.8	24.2	1.85	3.70	Colorimetric without ppt.
	µg/dl	115	93.9	136	10.55	21.10	
Lactate	mmol/l	1.55	1.27	1.83	0.14	0.28	Colorimetric Lactate Oxidase
	mg/dl	14.0	11.4	16.6	1.30	2.60	
LD (LDH)	U/l	438	372	504	33.00	66.00	P->L German methods 37°C
	U/l	316	269	363	23.50	47.00	P->L German methods 30°C
	U/l	222	189	255	16.50	33.00	P->L German methods 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
LD (LDH)	U/l	237	201	273	18.00	36.00	L->P IFCC 37°C
	U/l	171	145	197	13.00	26.00	L->P IFCC 30°C
	U/l	120	102	138	9.00	18.00	L->P IFCC 25°C
Lipase	U/l	38	31	45	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.95	0.83	1.06	0.06	0.11	Ion selective electrode
	mg/dl	0.656	0.577	0.735	0.04	0.08	
Magnesium	mmol/l	0.89	0.78	0.99	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.16	1.90	2.42	0.13	0.26	
Phosphate Inorganic	mmol/l	1.41	1.20	1.62	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.37	3.72	5.02	0.33	0.65	
	mmol/l	1.41	1.20	1.62	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.37	3.72	5.02	0.33	0.65	
Potassium	mmol/l	3.89	3.58	4.20	0.16	0.31	ISE method - indirect
Protein Total	g/l	58.8	47.0	70.6	5.90	11.80	Biuret reaction end point
	g/dl	5.88	4.70	7.06	0.59	1.18	
	g/l	58.1	46.4	69.8	5.85	11.70	Biuret reaction kinetic
	g/dl	5.81	4.64	6.98	0.59	1.17	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	50.1	39.6	60.6	5.25	10.50	FE+UIBC(saturation with iron)
	µg/dl	280	221	339	29.50	59.00	
Triglycerides	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.2	104	7.10	14.20	
	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	89.4	75.2	104	7.10	14.20	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Triglycerides	mmol/l	1.01	0.85	1.17	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	89.4	75.3	104	7.05	14.10	
	mmol/l	1.00	0.84	1.16	0.08	0.16	Lipase/Glycerol Dehydrogenase
	mg/dl	88.5	74.4	103	7.05	14.10	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.66	4.92	6.40	0.37	0.74	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.64	4.91	6.37	0.37	0.73	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.68	4.94	6.42	0.37	0.74	
Urea	mmol/l	6.70	5.69	7.71	0.51	1.01	Urease end point
	mg/dl	40.3	34.2	46.4	3.05	6.10	
	mmol/l	6.75	5.74	7.76	0.51	1.01	Urease kinetic
	mg/dl	40.6	34.5	46.7	3.05	6.10	
	mmol/l	6.75	5.74	7.76	0.51	1.01	BUN
	mg/dl	18.9	16.1	21.7	1.40	2.80	

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ELITech/Vitalab Selectra Pro/E/XL

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	42.1	35.8	48.4	3.15	6.30	Bromocresol Green
	g/dl	4.21	3.58	4.84	0.32	0.63	
Alkaline Phosphatase	U/l	275	234	316	20.50	41.00	Diethanolamine buffer DEA 37°C
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	38	31	45	3.50	7.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	17.7	14.0	21.4	1.85	3.70	Diazo with Sulphanilic Acid
	mg/dl	1.04	0.819	1.26	0.11	0.22	
Bilirubin Total	µmol/l	28.5	22.5	34.5	3.00	6.00	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.67	1.32	2.02	0.18	0.35	
Calcium	mmol/l	2.25	2.02	2.48	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.02	8.10	9.94	0.46	0.92	
	mmol/l	2.29	2.06	2.52	0.12	0.23	Methylthymol blue
	mg/dl	9.18	8.26	10.1	0.46	0.92	
	mmol/l	2.23	2.01	2.45	0.11	0.22	Arsenazo III
	mg/dl	8.94	8.06	9.82	0.44	0.88	
Cholesterol	mmol/l	4.51	3.92	5.10	0.30	0.59	Cholesterol Oxidase
	mg/dl	174	151	197	11.50	23.00	
Creatinine	µmol/l	108	86.5	130	10.75	21.50	Alkaline picrate no deproteinization
	mg/dl	1.22	0.977	1.46	0.12	0.24	
	µmol/l	125	99.6	150	12.70	25.40	Creatinine PAP method
	mg/dl	1.41	1.13	1.69	0.14	0.28	

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ELITech/Vitalab Selectra Pro/E/XL

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	116	92.8	139	11.60	23.20	Jaffe rate blanked
	mg/dl	1.31	1.05	1.57	0.13	0.26	
gamma-GT	U/l	49	42	56	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.45	5.48	7.42	0.49	0.97	Glucose oxidase
	mg/dl	116	98.7	133	8.65	17.30	
Phosphate Inorganic	mmol/l	1.43	1.21	1.65	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.43	3.75	5.11	0.34	0.68	
Protein Total	g/l	63.6	50.8	76.4	6.40	12.80	Biuret reaction end point
	g/dl	6.36	5.08	7.64	0.64	1.28	
Triglycerides	mmol/l	1.09	0.92	1.27	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	96.5	81.0	112	7.75	15.50	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.66	4.92	6.40	0.37	0.74	
Urea	mmol/l	7.21	6.12	8.30	0.55	1.09	Urease kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mmol/l	7.21	6.13	8.29	0.54	1.08	BUN
	mg/dl	20.2	17.2	23.2	1.50	3.00	

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HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Green
	g/dl	4.01	3.41	4.61	0.30	0.60	
	g/l	38.7	32.9	44.5	2.90	5.80	Bromocresol Purple
	g/dl	3.87	3.29	4.45	0.29	0.58	
Alkaline Phosphatase	U/l	123	105	141	9.00	18.00	Roche Integra AMP buffer 37°C
	U/l	96	82	110	7.00	14.00	Roche Integra AMP buffer 30°C
	U/l	79	67	91	6.00	12.00	Roche Integra AMP buffer 25°C
	U/l	174	148	200	13.00	26.00	AMP optimised to IFCC 37°C
	U/l	136	115	157	10.50	21.00	AMP optimised to IFCC 30°C
	U/l	111	95	127	8.00	16.00	AMP optimised to IFCC 25°C
	U/l	174	148	200	13.00	26.00	Randox AMP 37°C
	U/l	136	115	157	10.50	21.00	Randox AMP 30°C
	U/l	111	95	127	8.00	16.00	Randox AMP 25°C
ALT (GPT)	U/l	37	29	45	4.00	8.00	Tris buffer without P5P 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer without P5P 30°C
	U/l	21	16	26	2.50	5.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	69	59	79	5.00	10.00	Randox liquid stable pNPG7 37°C
	U/l	61	52	70	4.50	9.00	Roche liquid stable pNPG7 37°C
Amylase Total	U/l	86	73	99	6.50	13.00	Roche liquid stable pNPG7 37°C
	U/l	100	85	115	7.50	15.00	Randox liquid stable pNPG7 37°C
Acid Phosphatase (non-prostatic)	U/l	6.45	4.32	8.58	1.07	2.13	1-Naphthyl Phosphate substrate Kinetic 37°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Acid Phosphatase (non-prostatic)	U/l	4.80	3.22	6.38	0.79	1.58	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Prostatic)	U/l	16.6	11.1	22.1	2.75	5.50	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
	U/l	9.55	6.40	12.7	1.58	3.15	1-Naphthyl Phosphate substrate Kinetic 37°C
Acid Phosphatase (Total)	U/l	21.4	14.3	28.5	3.55	7.10	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
	U/l	16.0	10.7	21.3	2.65	5.30	1-Naphthyl Phosphate substrate Kinetic 37°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	20	32	3.00	6.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
Bile Acids	µmol/l	24.5	19.6	29.4	2.45	4.90	5th Generation Colorimetric
Bicarbonate	mmol/l	13.7	10.8	16.6	1.45	2.90	Colorimetric
	mmol/l	13.9	11.0	16.8	1.45	2.90	Enzymatic
Bilirubin Direct	µmol/l	20.4	16.1	24.7	2.15	4.30	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.19	0.942	1.44	0.12	0.25	
	µmol/l	21.6	17.1	26.1	2.25	4.50	Diazo with Sulphanilic Acid
	mg/dl	1.26	1.00	1.52	0.13	0.26	
Bilirubin Total	µmol/l	27.6	21.8	33.4	2.90	5.80	Diazo with Dichloroaniline (DCA)
	mg/dl	1.61	1.28	1.94	0.17	0.33	
	µmol/l	27.1	21.4	32.8	2.85	5.70	Diazo with Sulphanilic Acid
	mg/dl	1.59	1.25	1.93	0.17	0.34	
	µmol/l	27.1	21.4	32.8	2.85	5.70	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.59	1.25	1.93	0.17	0.34	
	µmol/l	28.1	22.2	34.0	2.95	5.90	Diazonium ion
	mg/dl	1.64	1.30	1.98	0.17	0.34	
	µmol/l	31.9	25.2	38.6	3.35	6.70	Oxidation to Biliverdin
	mg/dl	1.87	1.47	2.27	0.20	0.40	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.22	2.00	2.44	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.90	8.02	9.78	0.44	0.88	
	mmol/l	2.20	1.98	2.42	0.11	0.22	Arsenazo III
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.24	2.02	2.46	0.11	0.22	NM-BAPTA
	mg/dl	8.98	8.10	9.86	0.44	0.88	
Cholesterol	mmol/l	4.31	3.75	4.87	0.28	0.56	Cholesterol Oxidase
	mg/dl	166	145	187	10.50	21.00	
Chloride	mmol/l	95.9	88.3	104	3.80	7.60	ISE indirect
Cholinesterase	U/l	6698	5358	8038	670.00	1340.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	183	150	216	16.50	33.00	CK-NAC substrate start (DGKC) 37°C
	U/l	115	94	136	10.50	21.00	CK-NAC substrate start (DGKC) 30°C
	U/l	78	64	92	7.00	14.00	CK-NAC substrate start (DGKC) 25°C
	U/l	194	159	229	17.50	35.00	CK-NAC (IFCC) 37°C
	U/l	121	100	142	10.50	21.00	CK-NAC (IFCC) 30°C
	U/l	82	68	96	7.00	14.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	124	98.8	149	12.60	25.20	Alkaline picrate no deproteinization
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	127	102	152	12.50	25.00	Randox Enzymatic UV method
	mg/dl	1.44	1.15	1.73	0.15	0.29	
	µmol/l	126	101	151	12.50	25.00	Roche Creatinine Plus
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	µmol/l	126	101	151	12.50	25.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.42	1.14	1.70	0.14	0.28	
D-3-Hydroxybutyrate	mmol/l	0.24	0.20	0.27	0.02	0.04	Tris buffer 100mmol pH 8.5

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
gamma-GT	U/l	46	39	53	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	36	31	41	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	28	24	32	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	50	43	57	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	39	34	44	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	31	27	35	2.00	4.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
	U/l	54	46	62	4.00	8.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	43	36	50	3.50	7.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	33	28	38	2.50	5.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
GLDH	U/l	20	16	24	2.00	4.00	Triethanolamine buffer 50 mmol 37°C
	U/l	15	12	18	1.50	3.00	Triethanolamine buffer 50 mmol 30°C
	U/l	12	10	14	1.00	2.00	Triethanolamine buffer 50 mmol 25°C
Glucose	mmol/l	6.09	5.18	7.00	0.46	0.91	Hexokinase
	mg/dl	110	93.3	127	8.35	16.70	
	mmol/l	6.37	5.41	7.33	0.48	0.96	Glucose oxidase
	mg/dl	115	97.5	133	8.75	17.50	
alpha-HBDH	U/l	263	208	318	27.50	55.00	Oxobutyrate < 10 mmol/l 37°C
	U/l	199	157	241	21.00	42.00	Oxobutyrate < 10 mmol/l 30°C
	U/l	149	118	180	15.50	31.00	Oxobutyrate < 10 mmol/l 25°C
HDL - Cholesterol	mmol/l	1.24	1.05	1.43	0.10	0.19	Direct HDL Immunoseparation
	mg/dl	47.9	40.5	55.3	3.70	7.40	
	mmol/l	1.21	1.03	1.39	0.09	0.18	Direct HDL PEGME
	mg/dl	46.7	39.8	53.6	3.45	6.90	
	mmol/l	1.14	0.97	1.31	0.08	0.17	Direct Clearance Method
	mg/dl	44.0	37.5	50.5	3.25	6.50	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct HDL Roche 3rd generation
	mg/dl	45.9	39.0	52.8	3.45	6.90	
Iron	µmol/l	19.5	16.0	23.0	1.75	3.50	Colorimetric without ppt.
	µg/dl	109	89.4	129	9.80	19.60	
Lactate	mmol/l	1.48	1.21	1.75	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.3	10.9	15.7	1.20	2.40	
LD (LDH)	U/l	444	377	511	33.50	67.00	P->L German methods 37°C
	U/l	321	272	370	24.50	49.00	P->L German methods 30°C
	U/l	225	191	259	17.00	34.00	P->L German methods 25°C
	U/l	223	190	256	16.50	33.00	L->P IFCC 37°C
	U/l	161	137	185	12.00	24.00	L->P IFCC 30°C
	U/l	113	96	130	8.50	17.00	L->P IFCC 25°C
Lipase	U/l	34	27	41	3.50	7.00	Other Colorimetric 37°C
	U/l	36	29	43	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.93	0.81	1.04	0.06	0.11	Spectrophotometric
	mg/dl	0.642	0.565	0.719	0.04	0.08	
Magnesium	mmol/l	0.88	0.77	0.98	0.05	0.11	Xylidyl Blue
	mg/dl	2.13	1.88	2.38	0.13	0.25	
	mmol/l	0.84	0.74	0.94	0.05	0.10	Enzymatic
	mg/dl	2.04	1.80	2.28	0.12	0.24	
Phosphate Inorganic	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.94	3.63	4.25	0.16	0.31	ISE method - indirect
Protein Total	g/l	59.8	47.8	71.8	6.00	12.00	Biuret reaction end point
	g/dl	5.98	4.78	7.18	0.60	1.20	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Protein Total	g/l	62.1	49.7	74.5	6.20	12.40	Biuret reaction kinetic
	g/dl	6.21	4.97	7.45	0.62	1.24	
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - indirect
TIBC	µmol/l	48.4	38.2	58.6	5.10	10.20	FE+UIBC(saturation with iron)
	µg/dl	271	214	328	28.50	57.00	
Triglycerides	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	89.4	75.0	104	7.20	14.40	
	mmol/l	1.03	0.86	1.20	0.08	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	91.2	76.5	106	7.35	14.70	
	mmol/l	1.03	0.86	1.20	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	91.2	76.5	106	7.35	14.70	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.61	4.87	6.35	0.37	0.74	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.63	4.89	6.37	0.37	0.74	
	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.54	4.82	6.26	0.36	0.72	
Urea	mmol/l	7.16	6.09	8.23	0.54	1.07	Urease kinetic
	mg/dl	43.0	36.6	49.4	3.20	6.40	
	mmol/l	7.16	6.09	8.23	0.54	1.07	BUN
	mg/dl	20.1	17.1	23.1	1.50	3.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Green
	g/dl	3.98	3.38	4.58	0.30	0.60	
Alkaline Phosphatase	U/l	185	157	213	14.00	28.00	AMP optimised to IFCC 37°C
	U/l	144	122	166	11.00	22.00	AMP optimised to IFCC 30°C
	U/l	118	100	136	9.00	18.00	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	20	32	3.00	6.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
Bile Acids	µmol/l	24.3	19.4	29.2	2.45	4.90	Enzymatic Colorimetric
Bilirubin Total	µmol/l	31.9	25.2	38.6	3.35	6.70	Diazo with Sulphanilic Acid
	mg/dl	1.87	1.47	2.27	0.20	0.40	
Calcium	mmol/l	2.23	2.00	2.46	0.12	0.23	Cresolphthalein complexone
	mg/dl	8.94	8.02	9.86	0.46	0.92	
Cholesterol	mmol/l	4.16	3.62	4.70	0.27	0.54	Cholesterol Oxidase
	mg/dl	161	140	182	10.50	21.00	
Chloride	mmol/l	98.5	90.6	106	3.95	7.90	ISE indirect
CK Total	U/l	180	148	212	16.00	32.00	CK-NAC (IFCC) 37°C
	U/l	113	93	133	10.00	20.00	CK-NAC (IFCC) 30°C
	U/l	77	63	91	7.00	14.00	CK-NAC (IFCC) 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	123	98.7	147	12.15	24.30	Alkaline picrate no deproteinization
	mg/dl	1.39	1.12	1.66	0.14	0.27	
D-3-Hydroxybutyrate	mmol/l	0.28	0.24	0.32	0.02	0.04	Tris buffer 100mmol pH 8.5
gamma-GT	U/l	48	41	55	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	32	44	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	25	35	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	47	40	54	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	37	32	42	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	29	25	33	2.00	4.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.46	5.49	7.43	0.49	0.97	Hexokinase
	mg/dl	116	98.9	133	8.55	17.10	
	mmol/l	6.11	5.19	7.03	0.46	0.92	Glucose oxidase
	mg/dl	110	93.5	127	8.25	16.50	
HDL - Cholesterol	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct HDL Immunoseparation
	mg/dl	45.9	39.0	52.8	3.45	6.90	
LD (LDH)	U/l	450	383	517	33.50	67.00	P->L German methods 37°C
	U/l	325	277	373	24.00	48.00	P->L German methods 30°C
	U/l	228	194	262	17.00	34.00	P->L German methods 25°C
Magnesium	mmol/l	0.92	0.81	1.03	0.06	0.11	Enzymatic
	mg/dl	2.24	1.97	2.51	0.14	0.27	
Phosphate Inorganic	mmol/l	1.43	1.21	1.65	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.43	3.75	5.11	0.34	0.68	
Potassium	mmol/l	4.00	3.68	4.32	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.9	47.9	71.9	6.00	12.00	Biuret reaction end point
	g/dl	5.99	4.79	7.19	0.60	1.20	

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ILab 600®/650®/Aries®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Sodium	mmol/l	144	137	151	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.02	0.86	1.18	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	90.3	75.8	105	7.25	14.50	
	mmol/l	1.05	0.88	1.22	0.09	0.17	L/G Kinase EP. no correction
	mg/dl	92.9	77.7	108	7.60	15.20	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.85	5.09	6.61	0.38	0.76	
Urea	mmol/l	7.20	6.12	8.28	0.54	1.08	Urease end point
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mmol/l	7.20	6.12	8.28	0.54	1.08	BUN
	mg/dl	20.2	17.2	23.2	1.50	3.00	

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JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	38.7	32.9	44.5	2.90	5.80	Ortho Vitros Microslide Systems
	g/dl	3.87	3.29	4.45	0.29	0.58	
	g/l	40.8	34.6	47.0	3.10	6.20	Vitros DT60/DT60 II/DTSC II
	g/dl	4.08	3.46	4.70	0.31	0.62	
Alkaline Phosphatase	U/l	138	118	158	10.00	20.00	Ortho Vitros Microslide Systems 37°C
ALT (GPT)	U/l	46	36	56	5.00	10.00	Ortho Vitros Microslide Systems 37°C
Amylase Total	U/l	66	56	76	5.00	10.00	Ortho Vitros Microslide Systems 37°C
AST (GOT)	U/l	50	40	60	5.00	10.00	Ortho Vitros Microslide visible slide 37°C
Bicarbonate	mmol/l	14.6	11.6	17.6	1.50	3.00	Ortho Vitros Microslide Systems
Bilirubin Direct	µmol/l	12.4	9.80	15.0	1.30	2.60	Vitros conjugated from BUBC
	mg/dl	0.725	0.573	0.877	0.08	0.15	
Bilirubin Total	µmol/l	28.1	22.2	34.0	2.95	5.90	Vitros 250/500/700/950 Total Bilirubin
	mg/dl	1.64	1.30	1.98	0.17	0.34	
	µmol/l	29.3	23.1	35.5	3.10	6.20	Vitros 250/500/700/950 Total BUBC
	mg/dl	1.71	1.35	2.07	0.18	0.36	
Calcium	mmol/l	2.28	2.05	2.51	0.12	0.23	Ortho Vitros Microslide Systems
	mg/dl	9.14	8.22	10.1	0.46	0.92	
	mmol/l	2.29	2.06	2.52	0.12	0.23	Vitros DT60/DT60 II/DTSC II
	mg/dl	9.18	8.26	10.1	0.46	0.92	
Cholesterol	mmol/l	4.16	3.62	4.70	0.27	0.54	Ortho Vitros Microslide Systems
	mg/dl	161	140	182	10.50	21.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Cholesterol	mmol/l	4.25	3.70	4.80	0.28	0.55	Vitros DT60/DT60 II
	mg/dl	164	143	185	10.50	21.00	
Chloride	mmol/l	99.6	91.7	108	3.95	7.90	Ortho Vitros Microslide Systems
	mmol/l	101	92.5	110	4.25	8.50	Vitros DT60/DT60 II/DTE II
Cholinesterase	U/l	6640	5312	7968	664.00	1328.00	Ortho Vitros Microslide Systems 37°C
CK Total	U/l	179	146	212	16.50	33.00	Ortho Vitros Microslide Systems 37°C
	U/l	175	144	206	15.50	31.00	Vitros DT60/DT60 II/DTSC II 37°C
Creatinine	µmol/l	123	98.4	148	12.30	24.60	Vitros 250/500/700/950/5.1FS single slide
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	µmol/l	125	99.6	150	12.70	25.40	Vitros DT60/DT60 II/DTSC II
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	124	99.0	149	12.50	25.00	Vitros IDMS Traceable
	mg/dl	1.40	1.12	1.68	0.14	0.28	
Free T4	pmol/l	23.2	17.4	29.0	2.90	5.80	Vitros ECi
	ng/dl	1.81	1.36	2.26	0.23	0.45	
	pg/ml	18.1	13.6	22.6	2.25	4.50	Vitros ECi
gamma-GT	U/l	65	55	75	5.00	10.00	Ortho Vitros Microslide Systems 37°C
Glucose	mmol/l	5.91	5.03	6.79	0.44	0.88	Ortho Vitros Microslide Systems
	mg/dl	106	90.6	121	7.70	15.40	
	mmol/l	5.74	4.88	6.60	0.43	0.86	Vitros DT60/DT60 II
	mg/dl	103	87.9	118	7.55	15.10	
HDL - Cholesterol	mmol/l	1.22	1.03	1.41	0.10	0.19	Vitros Magnetic HDL
	mg/dl	47.1	39.8	54.4	3.65	7.30	
	mmol/l	1.21	1.03	1.39	0.09	0.18	Vitros 5.1 FS microtip assay
	mg/dl	46.7	39.8	53.6	3.45	6.90	

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JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.22	1.04	1.40	0.09	0.18	Vitros dHDL PTA/MgCl2 direct precipitation
	mg/dl	47.1	40.1	54.1	3.50	7.00	
Iron	µmol/l	20.1	16.5	23.7	1.80	3.60	Ortho Vitros Microslide Systems
	µg/dl	112	92.2	132	9.90	19.80	
Lactate	mmol/l	1.39	1.14	1.64	0.13	0.25	Ortho Vitros Microslide Systems
	mg/dl	12.5	10.3	14.7	1.10	2.20	
LD (LDH)	U/l	640	544	736	48.00	96.00	Ortho Vitros Microslide Systems 37°C
	U/l	636	540	732	48.00	96.00	Vitros DT60/DT60 II/DTSC II 37°C
Lipase	U/l	194	156	232	19.00	38.00	Ortho Vitros Microslide Systems 37°C
Lithium	mmol/l	1.09	0.96	1.22	0.06	0.13	Ortho Vitros Microslide Systems
	mg/dl	0.757	0.668	0.846	0.04	0.09	
Magnesium	mmol/l	0.88	0.77	0.98	0.05	0.11	Ortho Vitros Microslide Systems
	mg/dl	2.13	1.87	2.39	0.13	0.26	
	mmol/l	0.81	0.71	0.91	0.05	0.10	Vitros DT60/DT60 II
	mg/dl	1.97	1.73	2.21	0.12	0.24	
Phosphate Inorganic	mmol/l	1.48	1.26	1.70	0.11	0.22	Ortho Vitros Microslide Systems
	mg/dl	4.59	3.91	5.27	0.34	0.68	
	mmol/l	1.44	1.22	1.66	0.11	0.22	Vitros DT60/DT60 II
	mg/dl	4.46	3.78	5.14	0.34	0.68	
Potassium	mmol/l	3.96	3.64	4.28	0.16	0.32	Ortho Vitros Microslide Systems
	mmol/l	3.94	3.62	4.26	0.16	0.32	Vitros DT60/DT60 II/DTE II
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Ortho Vitros Microslide Systems
	g/dl	6.00	4.80	7.20	0.60	1.20	
	g/l	60.7	48.5	72.9	6.10	12.20	Vitros DT60/DT60 II
	g/dl	6.07	4.85	7.29	0.61	1.22	

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JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
PSA Total	ng/ml =	19.4	14.6	24.2	2.40	4.80	Ortho Vitros 3600/5600/ECi PSA II
Sodium	mmol/l	143	136	150	3.50	7.00	Ortho Vitros Microslide Systems
	mmol/l	143	136	150	3.50	7.00	Vitros DT60/DT60 II/DTE II
Thyroid Stimulating Hormone	µU/ml =	1.80	1.44	2.16	0.18	0.36	
	µU/ml =	1.68	1.35	2.01	0.17	0.33	Vitros ECi
	µU/ml =	1.63	1.30	1.96	0.17	0.33	
TIBC	µmol/l	53.8	42.5	65.1	5.65	11.30	Ortho Vitros Microslide Systems
	µg/dl	301	238	364	31.50	63.00	
Total T3	nmol/l	3.85	2.89	4.81	0.48	0.96	Vitros ECi
	ng/ml	2.51	1.88	3.14	0.32	0.63	
	ng/dl	251	188	314	31.50	63.00	Vitros ECi
Triglycerides	mmol/l	1.10	0.93	1.27	0.09	0.17	Ortho Vitros Microslide Systems
	mg/dl	97.4	82.0	113	7.70	15.40	
	mmol/l	1.07	0.90	1.24	0.09	0.17	Vitros DT60/DT60 II
	mg/dl	94.7	79.6	110	7.55	15.10	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.36	0.02	0.04	Ortho Vitros Microslide Systems
	mg/dl	5.41	4.70	6.12	0.36	0.71	
	mmol/l	0.32	0.28	0.36	0.02	0.04	Vitros DT60/DT60 II
	mg/dl	5.38	4.69	6.07	0.35	0.69	
Urea	mmol/l	6.60	5.61	7.59	0.50	0.99	Ortho Vitros Microslide Systems
	mg/dl	39.7	33.7	45.7	3.00	6.00	
	mmol/l	6.60	5.61	7.59	0.50	0.99	BUN
	mg/dl	18.5	15.7	21.3	1.40	2.80	

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Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	37.9	32.2	43.6	2.85	5.70	Bromocresol Green
	g/dl	3.79	3.22	4.36	0.29	0.57	
Alkaline Phosphatase	U/l	180	153	207	13.50	27.00	AMP optimised to IFCC 37°C
	U/l	140	119	161	10.50	21.00	AMP optimised to IFCC 30°C
	U/l	115	98	132	8.50	17.00	AMP optimised to IFCC 25°C
	U/l	177	150	204	13.50	27.00	AMP optimised to NVKC/SFBC 37°C
	U/l	138	117	159	10.50	21.00	AMP optimised to NVKC/SFBC 30°C
	U/l	113	96	130	8.50	17.00	AMP optimised to NVKC/SFBC 25°C
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
	U/l	30	24	36	3.00	6.00	Tris buffer without P5P 30°C
	U/l	23	18	28	2.50	5.00	Tris buffer without P5P 25°C
Amylase Total	U/l	96	81	111	7.50	15.00	Randox - Ethylidene pNPG7 37°C
	U/l	83	70	96	6.50	13.00	bioMerieux 2-chloro-pNPG3 37°C
AST (GOT)	U/l	42	33	51	4.50	9.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Bile Acids	µmol/l	26.6	21.3	31.9	2.65	5.30	Enzymatic Colorimetric
Bilirubin Direct	µmol/l	19.7	15.5	23.9	2.10	4.20	Diazo with Sulphanilic Acid
	mg/dl	1.15	0.907	1.39	0.12	0.24	
Bilirubin Total	µmol/l	27.4	21.6	33.2	2.90	5.80	Diazo with Sulphanilic Acid
	mg/dl	1.60	1.26	1.94	0.17	0.34	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bilirubin Total	µmol/l	26.1	20.7	31.5	2.70	5.40	Nitrobenzenediazonium salt
	mg/dl	1.53	1.21	1.85	0.16	0.32	
Calcium	mmol/l	2.25	2.02	2.48	0.12	0.23	Arsenazo III
	mg/dl	9.02	8.10	9.94	0.46	0.92	
Cholesterol	mmol/l	4.21	3.66	4.76	0.28	0.55	Cholesterol Oxidase
	mg/dl	163	141	185	11.00	22.00	
Chloride	mmol/l	101	92.8	109	4.10	8.20	ISE direct
CK Total	U/l	205	168	242	18.50	37.00	CK-NAC (IFCC) 37°C
	U/l	128	105	151	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	87	71	103	8.00	16.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	127	102	152	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.44	1.15	1.73	0.15	0.29	
	µmol/l	126	101	151	12.50	25.00	Randox Enzymatic UV method
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	µmol/l	126	101	151	12.50	25.00	Creatinine PAP method
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	µmol/l	125	100	150	12.50	25.00	Jaffe rate blanked
	mg/dl	1.41	1.13	1.69	0.14	0.28	
D-3-Hydroxybutyrate	mmol/l	0.28	0.23	0.32	0.02	0.04	Tris buffer 100mmol pH 8.5
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	43	36	50	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.16	5.24	7.08	0.46	0.92	Hexokinase
	mg/dl	111	94.4	128	8.30	16.60	
	mmol/l	6.21	5.28	7.14	0.47	0.93	Glucose oxidase
	mg/dl	112	95.1	129	8.45	16.90	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.38	1.18	1.58	0.10	0.20	Direct HDL PPD
	mg/dl	53.3	45.5	61.1	3.90	7.80	
	mmol/l	1.14	0.97	1.31	0.09	0.17	Direct HDL PEGME
	mg/dl	44.0	37.4	50.6	3.30	6.60	
Iron	µmol/l	22.9	18.8	27.0	2.05	4.10	Colorimetric without ppt.
	µg/dl	128	105	151	11.50	23.00	
LD (LDH)	U/l	474	402	546	36.00	72.00	P->L Scandinavian & Dutch 37°C
	U/l	342	290	394	26.00	52.00	P->L Scandinavian & Dutch 30°C
	U/l	240	204	276	18.00	36.00	P->L Scandinavian & Dutch 25°C
	U/l	454	385	523	34.50	69.00	P->L German methods 37°C
	U/l	328	278	378	25.00	50.00	P->L German methods 30°C
	U/l	230	195	265	17.50	35.00	P->L German methods 25°C
Magnesium	mmol/l	0.87	0.76	0.97	0.05	0.10	Arsenazo III
	mg/dl	2.11	1.85	2.37	0.13	0.26	
	mmol/l	0.96	0.84	1.07	0.06	0.11	Calmagite
	mg/dl	2.32	2.04	2.60	0.14	0.28	
	mmol/l	0.90	0.79	1.00	0.05	0.11	Xylidyl Blue
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Phosphate Inorganic	mmol/l	1.40	1.19	1.61	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.34	3.69	4.99	0.33	0.65	
Potassium	mmol/l	3.82	3.51	4.13	0.16	0.31	ISE method - direct
Protein Total	g/l	60.8	48.7	72.9	6.05	12.10	Biuret reaction end point
	g/dl	6.08	4.87	7.29	0.61	1.21	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - direct

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Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Triglycerides	mmol/l	1.04	0.87	1.21	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.1	107	7.45	14.90	
Uric Acid (Urate)	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.93	5.16	6.70	0.39	0.77	
	mmol/l	0.35	0.30	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.86	5.09	6.63	0.39	0.77	
	mmol/l	0.36	0.31	0.40	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.98	5.21	6.75	0.39	0.77	
Urea	mmol/l	7.10	6.03	8.17	0.54	1.07	Urease kinetic
	mg/dl	42.7	36.2	49.2	3.25	6.50	
	mmol/l	7.10	6.04	8.16	0.53	1.06	BUN
	mg/dl	19.9	16.9	22.9	1.50	3.00	

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MEAN OF ALL INSTRUMENTS

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Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Green
	g/dl	3.98	3.38	4.58	0.30	0.60	
	g/l	39.9	33.9	45.9	3.00	6.00	Bromocresol Purple
	g/dl	3.99	3.39	4.59	0.30	0.60	
	g/l	38.7	32.9	44.5	2.90	5.80	Ortho Vitros Microslide Systems
	g/dl	3.87	3.29	4.45	0.29	0.58	
	g/l	38.1	32.4	43.8	2.85	5.70	Turbidimetric Assays
	g/dl	3.81	3.24	4.38	0.29	0.57	
Alkaline Phosphatase	U/l	138	118	158	10.00	20.00	Ortho Vitros Microslide Systems 37°C
	U/l	278	236	320	21.00	42.00	Diethanolamine buffer DEA 37°C
	U/l	217	184	250	16.50	33.00	Diethanolamine buffer DEA 30°C
	U/l	178	151	205	13.50	27.00	Diethanolamine buffer DEA 25°C
	U/l	181	154	208	13.50	27.00	AMP optimised to IFCC 37°C
	U/l	141	120	162	10.50	21.00	AMP optimised to IFCC 30°C
	U/l	116	98	134	9.00	18.00	AMP optimised to IFCC 25°C
	U/l	173	147	199	13.00	26.00	AMP optimised to NVKC/SFBC 37°C
	U/l	135	115	155	10.00	20.00	AMP optimised to NVKC/SFBC 30°C
	U/l	111	94	128	8.50	17.00	AMP optimised to NVKC/SFBC 25°C
	U/l	181	154	208	13.50	27.00	p-Nitrophenylphosphate AMP 37°C
	U/l	141	120	162	10.50	21.00	p-Nitrophenylphosphate AMP 30°C
	U/l	116	98	134	9.00	18.00	p-Nitrophenylphosphate AMP 25°C

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ALT (GPT)	U/l	46	36	56	5.00	10.00	Ortho Vitros Microslide Systems 37°C
	U/l	41	33	49	4.00	8.00	Tris buffer with P5P 37°C
	U/l	30	24	36	3.00	6.00	Tris buffer with P5P 30°C
	U/l	23	19	27	2.00	4.00	Tris buffer with P5P 25°C
	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
	U/l	35	28	42	3.50	7.00	Tris buffer SCE 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer SCE 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer SCE 25°C
Amylase Pancreatic	U/l	59	50	68	4.50	9.00	Immunoinhibition EPS substrate 37°C
	U/l	61	52	70	4.50	9.00	Roche liquid stable pNPG7 37°C
	U/l	69	59	79	5.00	10.00	Randox liquid stable pNPG7 37°C
Amylase Total	U/l	88	75	101	6.50	13.00	pNP Maltotrioside substrates 37°C
	U/l	89	75	103	7.00	14.00	Siemens - blocked pNPG7 37°C
	U/l	72	61	83	5.50	11.00	Randox - Ethylidene pNPG7 37°C
	U/l	95	81	109	7.00	14.00	Randox liquid stable pNPG7 37°C
	U/l	87	74	100	6.50	13.00	BM/Roche Colorimetric pNPG7 37°C
	U/l	90	77	103	6.50	13.00	Beckman maltotetraose 37°C
	U/l	89	76	102	6.50	13.00	Saccharogenic 37°C
	U/l	90	77	103	6.50	13.00	Siemens 2-chloro-pNP linked substrate 37°C
	U/l	89	76	102	6.50	13.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	66	56	76	5.00	10.00	Ortho Vitros Microslide Systems 37°C
	U/l	89	75	103	7.00	14.00	Other Roche 2-chloro-pNPG7 37°C
	U/l	88	75	101	6.50	13.00	Roche liquid stable pNPG7 37°C

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Amylase Total	U/l	91	77	105	7.00	14.00	Siemens 2-chloro-pNPG3 37°C
	U/l	84	72	96	6.00	12.00	bioMerieux 2-chloro-pNPG3 37°C
	U/l	89	75	103	7.00	14.00	Beckman Coulter - blocked pNPG7 37°C
	U/l	92	78	106	7.00	14.00	Beckman Synchron AMY7 37°C
Apolipoprotein A-1	g/l	1.22	1.00	1.44	0.11	0.22	Immunoturbidimetric
	mg/dl	122	100	144	11.00	22.00	
Apolipoprotein B	g/l	0.71	0.59	0.84	0.06	0.13	Immunoturbidimetric
	mg/dl	71.3	58.5	84.1	6.40	12.80	
Acid Phosphatase (non-prostatic)	U/l	6.45	4.32	8.58	1.07	2.13	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	4.80	3.22	6.38	0.79	1.58	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Prostatic)	U/l	9.55	6.40	12.7	1.58	3.15	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	16.6	11.1	22.1	2.75	5.50	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Total)	U/l	16.0	10.7	21.3	2.65	5.30	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	21.4	14.3	28.5	3.55	7.10	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
AST (GOT)	U/l	50	40	60	5.00	10.00	Ortho Vitros Microslide visible slide 37°C
	U/l	50	40	60	5.00	10.00	Tris buffer with P5P 37°C
	U/l	34	27	41	3.50	7.00	Tris buffer with P5P 30°C
	U/l	24	19	29	2.50	5.00	Tris buffer with P5P 25°C
	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	20	32	3.00	6.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
	U/l	37	29	45	4.00	8.00	Tris buffer SCE 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer SCE 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer SCE 25°C
Bile Acids	µmol/l	24.9	19.9	29.9	2.50	5.00	4th Generation Colorimetric

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Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bile Acids	µmol/l	24.5	19.6	29.4	2.45	4.90	5th Generation Colorimetric
Bicarbonate	mmol/l	13.6	10.8	16.4	1.40	2.80	Colorimetric
	mmol/l	14.6	11.6	17.6	1.50	3.00	Ortho Vitros Microslide Systems
	mmol/l	13.6	10.8	16.4	1.40	2.80	Differential rate pH change
	mmol/l	13.8	10.9	16.7	1.45	2.90	Enzymatic
	mmol/l	13.6	10.8	16.4	1.40	2.80	Ion selective electrode
Bilirubin Direct	µmol/l	21.9	17.3	26.5	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.28	1.01	1.55	0.14	0.27	
	µmol/l	12.4	9.80	15.0	1.30	2.60	Vitros conjugated from BUBC
	mg/dl	0.725	0.573	0.877	0.08	0.15	
	µmol/l	22.2	17.5	26.9	2.35	4.70	Diazo with Sulphanilic Acid
	mg/dl	1.30	1.02	1.58	0.14	0.28	
	µmol/l	20.9	16.5	25.3	2.20	4.40	Diazo with Dichloroaniline (DCA)
	mg/dl	1.22	0.965	1.48	0.13	0.26	
	µmol/l	19.2	15.2	23.2	2.00	4.00	Oxidation to Biliverdin
	mg/dl	1.12	0.889	1.35	0.12	0.23	
	µmol/l	19.6	15.5	23.7	2.05	4.10	Modified Jendrassik
	mg/dl	1.15	0.907	1.39	0.12	0.24	
Bilirubin Total	µmol/l	28.1	22.2	34.0	2.95	5.90	Vitros 250/500/700/950 Total Bilirubin
	mg/dl	1.64	1.30	1.98	0.17	0.34	
	µmol/l	29.3	23.1	35.5	3.10	6.20	Vitros 250/500/700/950 Total BUBC
	mg/dl	1.71	1.35	2.07	0.18	0.36	
	µmol/l	38.9	30.7	47.1	4.10	8.20	Diazo with Dichloroaniline (DCA)
	mg/dl	2.28	1.80	2.76	0.24	0.48	
	µmol/l	30.3	24.0	36.6	3.15	6.30	Diazo with Sulphanilic Acid
	mg/dl	1.77	1.40	2.14	0.19	0.37	

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Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bilirubin Total	µmol/l	30.9	24.4	37.4	3.25	6.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.81	1.43	2.19	0.19	0.38	
	µmol/l	26.3	20.7	31.9	2.80	5.60	Nitrobenzenediazonium salt
	mg/dl	1.54	1.21	1.87	0.17	0.33	
	µmol/l	27.7	21.9	33.5	2.90	5.80	Diazonium ion
	mg/dl	1.62	1.28	1.96	0.17	0.34	
	µmol/l	31.5	24.9	38.1	3.30	6.60	Oxidation to Biliverdin
	mg/dl	1.84	1.46	2.22	0.19	0.38	
	µmol/l	37.8	29.9	45.7	3.95	7.90	Modified Jendrassik
	mg/dl	2.21	1.75	2.67	0.23	0.46	
Calcium	mmol/l	2.20	1.98	2.42	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.28	2.05	2.51	0.12	0.23	Ortho Vitros Microslide Systems
	mg/dl	9.14	8.22	10.1	0.46	0.92	
	mmol/l	2.20	1.98	2.42	0.11	0.22	Ion selective electrode
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.30	2.07	2.53	0.12	0.23	Methylthymol blue
	mg/dl	9.22	8.30	10.1	0.46	0.92	
	mmol/l	2.23	2.01	2.45	0.11	0.22	Arsenazo III
	mg/dl	8.94	8.06	9.82	0.44	0.88	
	mmol/l	2.22	2.00	2.44	0.11	0.22	NM-BAPTA
	mg/dl	8.90	8.02	9.78	0.44	0.88	
Cholesterol	mmol/l	4.16	3.62	4.70	0.27	0.54	Ortho Vitros Microslide Systems
	mg/dl	161	140	182	10.50	21.00	

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Cholesterol	mmol/l	4.31	3.75	4.87	0.28	0.56	Cholesterol Oxidase
	mg/dl	166	145	187	10.50	21.00	
Chloride	mmol/l	101	92.7	109	4.15	8.30	Colorimetric
	mmol/l	99.6	91.7	108	3.95	7.90	Ortho Vitros Microslide Systems
	mmol/l	97.9	90.1	106	3.90	7.80	ISE indirect
	mmol/l	99.9	92.0	108	3.95	7.90	ISE direct
Cholinesterase	U/l	6928	5543	8313	692.50	1385.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	179	146	212	16.50	33.00	Ortho Vitros Microslide Systems 37°C
	U/l	195	160	230	17.50	35.00	CK-NAC serum start (DGKC) 37°C
	U/l	122	100	144	11.00	22.00	CK-NAC serum start (DGKC) 30°C
	U/l	83	68	98	7.50	15.00	CK-NAC serum start (DGKC) 25°C
	U/l	194	159	229	17.50	35.00	CK-NAC substrate start (DGKC) 37°C
	U/l	121	100	142	10.50	21.00	CK-NAC substrate start (DGKC) 30°C
	U/l	82	68	96	7.00	14.00	CK-NAC substrate start (DGKC) 25°C
	U/l	199	163	235	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	125	102	148	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	85	69	101	8.00	16.00	CK-NAC (IFCC) 25°C
	U/l	197	162	232	17.50	35.00	Monothioglycerol 37°C
	U/l	123	101	145	11.00	22.00	Monothioglycerol 30°C
	U/l	84	69	99	7.50	15.00	Monothioglycerol 25°C
	U/l	186	153	219	16.50	33.00	Dithioerythritol 37°C
	U/l	116	96	136	10.00	20.00	Dithioerythritol 30°C
	U/l	79	65	93	7.00	14.00	Dithioerythritol 25°C
	U/l	191	157	225	17.00	34.00	Dithioerythritol (DTE) IFCC correlated 37°C
	U/l	120	98	142	11.00	22.00	Dithioerythritol (DTE) IFCC correlated 30°C
	U/l	81	67	95	7.00	14.00	Dithioerythritol (DTE) IFCC correlated 25°C

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Copper	µmol/l	16.7	13.4	20.0	1.65	3.30	Atomic absorption
	µg/dl	106	85.2	127	10.40	20.80	
	µmol/l	16.2	13.0	19.4	1.60	3.20	Colorimetric
	µg/dl	103	82.7	123	10.15	20.30	
Cortisol	nmol/l	559	419	699	70.00	140.00	Roche Cobas E411
	µg/dl	20.1	15.1	25.1	2.50	5.00	
Creatinine	µmol/l	118	94.0	142	12.00	24.00	Alkaline picrate with deproteinization
	mg/dl	1.33	1.06	1.60	0.14	0.27	
	µmol/l	122	97.6	146	12.20	24.40	Alkaline picrate no deproteinization
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	µmol/l	123	98.4	148	12.30	24.60	Vitros 250/500/700/950/5.1FS single slide
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	µmol/l	133	106	160	13.50	27.00	Randox Enzymatic UV method
	mg/dl	1.50	1.20	1.80	0.15	0.30	
	µmol/l	125	100	150	12.50	25.00	Creatinine PAP method
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	126	100	152	13.00	26.00	Roche Creatinine Plus
	mg/dl	1.42	1.13	1.71	0.15	0.29	
	µmol/l	124	99.6	148	12.20	24.40	Jaffe rate blanked
	mg/dl	1.40	1.13	1.67	0.14	0.27	
	µmol/l	124	99.6	148	12.20	24.40	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.40	1.13	1.67	0.14	0.27	
	µmol/l	118	94.6	141	11.70	23.40	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.33	1.07	1.59	0.13	0.26	

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Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	124	99.0	149	12.50	25.00	Vitros IDMS Traceable
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	118	94.5	142	11.75	23.50	IDMS traceable
	mg/dl	1.33	1.07	1.59	0.13	0.26	
D-3-Hydroxybutyrate	mmol/l	0.29	0.25	0.33	0.02	0.04	Tris buffer 100mmol pH 8.5
Digoxin	nmol/l	1.84	1.48	2.21	0.18	0.36	Immunoturbidimetric
	ng/ml	1.44	1.16	1.72	0.14	0.28	
Folate	nmol/l	47.2	35.9	58.5	5.65	11.30	Roche Cobas E411
	ng/ml	20.8	15.8	25.8	2.50	5.00	
Free T4	pmol/l	15.5	11.6	19.4	1.95	3.90	Abbott Architect
	ng/dl	1.21	0.905	1.52	0.15	0.31	
	pg/ml	12.1	9.05	15.2	1.53	3.05	Abbott Architect
	pmol/l	16.9	12.7	21.1	2.10	4.20	Siemens Centaur XP/Classic
	ng/dl	1.32	0.991	1.65	0.16	0.33	
	pg/ml	13.2	9.91	16.5	1.65	3.29	Siemens Centaur XP/Classic
	pmol/l	16.2	12.1	20.3	2.05	4.10	Beckman Access
	ng/dl	1.26	0.944	1.58	0.16	0.32	
	pg/ml	12.6	9.44	15.8	1.58	3.16	Beckman Access
	pmol/l	14.8	11.1	18.5	1.85	3.70	Beckman DxI800
	ng/dl	1.15	0.866	1.43	0.14	0.28	
	pg/ml	11.5	8.66	14.3	1.42	2.84	Beckman DxI800
	pmol/l	17.9	13.5	22.3	2.20	4.40	BioMerieux Vidas
	ng/dl	1.40	1.05	1.75	0.18	0.35	
	pg/ml	14.0	10.5	17.5	1.75	3.50	BioMerieux Vidas
	pmol/l	19.3	14.5	24.1	2.40	4.80	Siemens Immulite 1000
	ng/dl	1.51	1.13	1.89	0.19	0.38	
	pg/ml	15.1	11.3	18.9	1.90	3.80	Siemens Immulite 1000

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RANDOX

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Free T4	pmol/l	23.2	17.4	29.0	2.90	5.80	Vitros ECi
	ng/dl	1.81	1.36	2.26	0.23	0.45	
	pg/ml	18.1	13.6	22.6	2.25	4.50	Vitros ECi
	pmol/l	20.1	15.0	25.2	2.55	5.10	Roche Elecsys
	ng/dl	1.57	1.17	1.97	0.20	0.40	
	pg/ml	15.7	11.7	19.7	2.00	4.00	Roche Elecsys
	pmol/l	19.2	14.4	24.0	2.40	4.80	Roche Modular E170
	ng/dl	1.50	1.12	1.88	0.19	0.38	
	pg/ml	15.0	11.2	18.8	1.90	3.80	Roche Modular E170
	pmol/l	19.8	14.8	24.8	2.50	5.00	Roche Cobas E411
	ng/dl	1.54	1.15	1.93	0.20	0.39	
	pg/ml	15.4	11.5	19.3	1.95	3.90	Roche Cobas E411
	pmol/l	19.4	14.5	24.3	2.45	4.90	Roche Cobas 6000/8000
	ng/dl	1.51	1.13	1.89	0.19	0.38	
	pg/ml	15.1	11.3	18.9	1.90	3.80	Roche Cobas 6000/8000
Gentamicin	µmol/l	8.43	6.74	10.1	0.85	1.69	Immunoturbidimetric
	µg/ml	4.03	3.22	4.84	0.41	0.81	
gamma-GT	U/l	48	41	55	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	32	44	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	25	35	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	65	55	75	5.00	10.00	Ortho Vitros Microslide Systems 37°C
	U/l	43	37	49	3.00	6.00	Gamma glutamyl-4-nitroanilide 37°C
	U/l	34	29	39	2.50	5.00	Gamma glutamyl-4-nitroanilide 30°C
	U/l	27	23	31	2.00	4.00	Gamma glutamyl-4-nitroanilide 25°C

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	43	36	50	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
	U/l	54	46	62	4.00	8.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	43	36	50	3.50	7.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	33	28	38	2.50	5.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
GLDH	U/l	15	12	18	1.50	3.00	Triethanolamine buffer 50 mmol 37°C
	U/l	12	9	15	1.50	3.00	Triethanolamine buffer 50 mmol 30°C
	U/l	9	7	11	1.00	2.00	Triethanolamine buffer 50 mmol 25°C
Glucose	mmol/l	5.91	5.03	6.79	0.44	0.88	Ortho Vitros Microslide Systems
	mg/dl	106	90.6	121	7.70	15.40	
	mmol/l	6.16	5.23	7.09	0.47	0.93	Glucose dehydrogenase
	mg/dl	111	94.2	128	8.40	16.80	
	mmol/l	6.13	5.21	7.05	0.46	0.92	Hexokinase
	mg/dl	110	93.9	126	8.05	16.10	
	mmol/l	6.04	5.13	6.95	0.46	0.91	Oxygen electrode
	mg/dl	109	92.4	126	8.30	16.60	
	mmol/l	6.27	5.33	7.21	0.47	0.94	Glucose oxidase
	mg/dl	113	96.0	130	8.50	17.00	
alpha-HBDH	U/l	263	208	318	27.50	55.00	Oxobutyrate < 10 mmol/l 37°C
	U/l	199	157	241	21.00	42.00	Oxobutyrate < 10 mmol/l 30°C
	U/l	149	118	180	15.50	31.00	Oxobutyrate < 10 mmol/l 25°C
HDL - Cholesterol	mmol/l	1.39	1.18	1.60	0.11	0.21	Direct HDL PPD
	mg/dl	53.7	45.5	61.9	4.10	8.20	

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.22	1.04	1.40	0.09	0.18	Direct HDL Immunoseparation
	mg/dl	47.1	40.1	54.1	3.50	7.00	
	mmol/l	1.22	1.03	1.41	0.10	0.19	Vitros Magnetic HDL
	mg/dl	47.1	39.8	54.4	3.65	7.30	
	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct HDL PEGME
	mg/dl	45.9	39.0	52.8	3.45	6.90	
	mmol/l	1.26	1.07	1.45	0.10	0.19	Direct Clearance Method
	mg/dl	48.6	41.3	55.9	3.65	7.30	
	mmol/l	1.21	1.03	1.39	0.09	0.18	Vitros 5.1 FS microtip assay
	mg/dl	46.7	39.8	53.6	3.45	6.90	
	mmol/l	1.22	1.04	1.40	0.09	0.18	Vitros dHDL PTA/MgCl2 direct precipitation
	mg/dl	47.1	40.1	54.1	3.50	7.00	
	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct HDL Roche 3rd generation
	mg/dl	45.9	39.0	52.8	3.45	6.90	
	mmol/l	1.41	1.20	1.62	0.11	0.21	HDL - Ultra
	mg/dl	54.4	46.3	62.5	4.05	8.10	
Immunoglobulin A	g/l	2.48	1.86	3.10	0.31	0.62	Immunoturbidimetric
	mg/dl	248	186	310	31.00	62.00	
Immunoglobulin G	g/l	8.28	6.79	9.77	0.75	1.49	Immunoturbidimetric
	mg/dl	828	679	977	74.50	149.00	
Immunoglobulin M	g/l	0.84	0.67	1.01	0.08	0.17	Immunoturbidimetric
	mg/dl	84.2	67.4	101	8.40	16.80	
Iron	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric with ppt.
	µg/dl	112	91.7	132	10.15	20.30	
	µmol/l	19.8	16.3	23.3	1.75	3.50	Colorimetric without ppt.
	µg/dl	111	91.1	131	9.95	19.90	

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Iron	µmol/l	20.1	16.5	23.7	1.80	3.60	Ortho Vitros Microslide Systems
	µg/dl	112	92.2	132	9.90	19.80	
Lactate	mmol/l	1.48	1.21	1.75	0.14	0.27	Ion selective electrode
	mg/dl	13.3	10.9	15.7	1.20	2.40	
	mmol/l	1.48	1.21	1.75	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.3	10.9	15.7	1.20	2.40	
	mmol/l	1.39	1.14	1.64	0.13	0.25	Ortho Vitros Microslide Systems
	mg/dl	12.5	10.3	14.7	1.10	2.20	
	mmol/l	1.45	1.19	1.71	0.13	0.26	UV LDH
	mg/dl	13.1	10.7	15.5	1.20	2.40	
LAP	U/l	22	19	25	1.50	3.00	NAGEL 37°C
LD (LDH)	U/l	640	544	736	48.00	96.00	Ortho Vitros Microslide Systems 37°C
	U/l	203	172	234	15.50	31.00	L->P 37°C
	U/l	147	124	170	11.50	23.00	L->P 30°C
	U/l	103	87	119	8.00	16.00	L->P 25°C
	U/l	484	411	557	36.50	73.00	P->L Scandinavian & Dutch 37°C
	U/l	349	297	401	26.00	52.00	P->L Scandinavian & Dutch 30°C
	U/l	245	208	282	18.50	37.00	P->L Scandinavian & Dutch 25°C
	U/l	444	377	511	33.50	67.00	P->L German methods 37°C
	U/l	321	272	370	24.50	49.00	P->L German methods 30°C
	U/l	225	191	259	17.00	34.00	P->L German methods 25°C
	U/l	453	385	521	34.00	68.00	P->L SFBC 37°C
	U/l	327	278	376	24.50	49.00	P->L SFBC 30°C
	U/l	230	195	265	17.50	35.00	P->L SFBC 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
LD (LDH)	U/l	227	193	261	17.00	34.00	L->P IFCC 37°C
	U/l	164	139	189	12.50	25.00	L->P IFCC 30°C
	U/l	115	98	132	8.50	17.00	L->P IFCC 25°C
Lipase	U/l	35	28	42	3.50	7.00	Other Colorimetric 37°C
	U/l	194	156	232	19.00	38.00	Ortho Vitros Microslide Systems 37°C
	U/l	36	29	43	3.50	7.00	Roche Colorimetric 37°C
	U/l	170	136	204	17.00	34.00	Randox Turbidimetric with colipase 37°C
	U/l	44	35	53	4.50	9.00	Randox Colorimetric 37°C
Lithium	mmol/l	1.00	0.88	1.12	0.06	0.12	Atomic absorption
	mg/dl	0.692	0.609	0.775	0.04	0.08	
	mmol/l	1.09	0.96	1.22	0.06	0.13	Ortho Vitros Microslide Systems
	mg/dl	0.757	0.668	0.846	0.04	0.09	
	mmol/l	0.96	0.84	1.07	0.06	0.12	Flame photometry
	mg/dl	0.666	0.586	0.746	0.04	0.08	
	mmol/l	0.95	0.83	1.06	0.06	0.11	Ion selective electrode
	mg/dl	0.658	0.579	0.737	0.04	0.08	
	mmol/l	0.95	0.84	1.06	0.06	0.11	Spectrophotometric
	mg/dl	0.659	0.580	0.738	0.04	0.08	
	mmol/l	0.90	0.80	1.01	0.05	0.11	Randox Colorimetric
	mg/dl	0.627	0.552	0.702	0.04	0.08	
Magnesium	mmol/l	0.85	0.75	0.95	0.05	0.10	Arsenazo III
	mg/dl	2.07	1.82	2.32	0.13	0.25	
	mmol/l	0.88	0.77	0.98	0.05	0.11	Ortho Vitros Microslide Systems
	mg/dl	2.13	1.87	2.39	0.13	0.26	
	mmol/l	0.89	0.78	1.00	0.05	0.11	Calmagite
	mg/dl	2.17	1.91	2.43	0.13	0.26	

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Magnesium	mmol/l	0.89	0.78	0.99	0.05	0.11	Xylidyl Blue
	mg/dl	2.16	1.90	2.42	0.13	0.26	
	mmol/l	0.84	0.74	0.95	0.05	0.10	Methylthymol blue
	mg/dl	2.05	1.81	2.29	0.12	0.24	
	mmol/l	0.88	0.78	0.99	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.14	1.89	2.39	0.13	0.25	
	mmol/l	0.85	0.75	0.96	0.05	0.10	Enzymatic
	mg/dl	2.07	1.82	2.32	0.13	0.25	
NEFA	mmol/l	0.82	0.70	0.94	0.06	0.12	Colorimetric
Osmolality	mOsm/kg	288	230	346	29.00	58.00	Calculated
	mOsm/kg	304	243	365	30.50	61.00	Freezing point depression
	mOsm/kg	306	245	367	30.50	61.00	Vapour pressure
Paracetamol	mmol/l	0.07	0.06	0.09	0.01	0.01	Colorimetric
	mg/l	11.3	9.08	13.5	1.11	2.22	
Phosphate Inorganic	mmol/l	1.48	1.26	1.70	0.11	0.22	Ortho Vitros Microslide Systems
	mg/dl	4.59	3.91	5.27	0.34	0.68	
	mmol/l	1.39	1.18	1.60	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.31	3.66	4.96	0.33	0.65	
	mmol/l	1.37	1.17	1.57	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.25	3.63	4.87	0.31	0.62	
Potassium	mmol/l	3.96	3.64	4.28	0.16	0.32	Ortho Vitros Microslide Systems
	mmol/l	3.94	3.62	4.26	0.16	0.32	Enzymatic
	mmol/l	3.96	3.64	4.28	0.16	0.32	Flame photometry
	mmol/l	3.87	3.56	4.18	0.16	0.31	ISE method - direct

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Potassium	mmol/l	3.90	3.59	4.21	0.16	0.31	ISE method - indirect
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Ortho Vitros Microslide Systems
	g/dl	6.00	4.80	7.20	0.60	1.20	
	g/l	60.1	48.1	72.1	6.00	12.00	Biuret reaction end point
	g/dl	6.01	4.81	7.21	0.60	1.20	
	g/l	58.7	47.0	70.4	5.85	11.70	Biuret reaction kinetic
	g/dl	5.87	4.70	7.04	0.59	1.17	
PSA Total	ng/ml =	19.1	14.3	23.9	2.40	4.80	Roche Cobas Core EIA
	ng/ml =	13.8	10.4	17.2	1.70	3.40	Abbott Axsym - monoclonal
	ng/ml =	18.4	13.8	23.0	2.30	4.60	Roche Elecsys Modular E170
	ng/ml =	18.6	14.0	23.2	2.30	4.60	Beckman Access standardised to Hybritech
	ng/ml =	17.7	13.3	22.1	2.20	4.40	bioMerieux VIDAS TPSA
	ng/ml =	15.1	11.3	18.9	1.90	3.80	Siemens Centaur XP/Classic
	ng/ml =	16.0	12.0	20.0	2.00	4.00	Abbott Architect
	ng/ml =	18.8	14.1	23.5	2.35	4.70	Cobas E411
	ng/ml =	19.6	14.7	24.5	2.45	4.90	Roche Cobas 6000/8000
	ng/ml =	19.4	14.6	24.2	2.40	4.80	Ortho Vitros 3600/5600/ECi PSA II
Salicylate	mmol/l	0.42	0.34	0.51	0.04	0.08	Enzymatic
	mg/dl	5.81	4.65	6.97	0.58	1.16	
Sodium	mmol/l	143	136	150	3.50	7.00	Ortho Vitros Microslide Systems
	mmol/l	147	140	154	3.50	7.00	Enzymatic
	mmol/l	141	134	148	3.50	7.00	Flame photometry
	mmol/l	141	134	148	3.50	7.00	ISE method - direct
	mmol/l	143	135	151	4.00	8.00	ISE method - indirect
Theophylline	µmol/l	26.8	21.4	32.1	2.68	5.35	Immunoturbidimetric
	µg/ml	4.82	3.86	5.78	0.48	0.96	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Thyroid Stimulating Hormone	µU/ml =	1.32	1.06	1.58	0.13	0.26	Abbott Architect
	µU/ml =	1.64	1.31	1.97	0.17	0.33	Siemens Centaur XP/Classic
	µU/ml =	1.47	1.18	1.76	0.15	0.29	Siemens Centaur XP/Classic 3rd Generation
	µU/ml =	1.61	1.29	1.93	0.16	0.32	Beckman Access hyperTSH 3rd Generation
	µU/ml =	1.86	1.49	2.23	0.19	0.37	bioMerieux VIDAS TSH
	µU/ml =	1.59	1.27	1.91	0.16	0.32	Siemens Immulite 1000
	µU/ml =	1.68	1.35	2.01	0.17	0.33	Vitros ECi
	µU/ml =	1.85	1.48	2.22	0.19	0.37	Roche Elecsys
	µU/ml =	1.84	1.47	2.21	0.19	0.37	Roche Modular E170
	µU/ml =	1.84	1.47	2.21	0.19	0.37	Roche Cobas E411
	µU/ml =	1.83	1.47	2.19	0.18	0.36	Roche Cobas 6000/8000
	µU/ml =	1.50	1.20	1.80	0.15	0.30	Siemens Centaur XP/Classic TSH3-Ultra
TIBC	µmol/l	53.8	42.5	65.1	5.65	11.30	Ortho Vitros Microslide Systems
	µg/dl	301	238	364	31.50	63.00	
	µmol/l	50.0	39.5	60.5	5.25	10.50	Removal of excess free iron
	µg/dl	280	221	339	29.50	59.00	
	µmol/l	50.3	39.7	60.9	5.30	10.60	FE+UIBC(saturation with iron)
	µg/dl	281	222	340	29.50	59.00	
	µmol/l	50.0	39.5	60.5	5.25	10.50	Direct Colorimetric
	µg/dl	280	221	339	29.50	59.00	
	µmol/l	56.1	44.3	67.9	5.90	11.80	Randox Direct
	µg/dl	314	248	380	33.00	66.00	
Tobramycin	µmol/l	5.30	4.24	6.36	0.53	1.06	Immunoturbidimetric
	µg/ml	2.48	1.98	2.98	0.25	0.50	

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Total T3	nmol/l	2.80	2.10	3.50	0.35	0.70	Abbott Architect
	ng/ml	1.82	1.37	2.27	0.23	0.45	
	ng/dl	182	137	227	22.50	45.00	Abbott Architect
	nmol/l	3.18	2.39	3.97	0.40	0.79	Siemens Centaur XP/Classic
	ng/ml	2.07	1.56	2.58	0.26	0.51	
	ng/dl	207	156	258	25.50	51.00	Siemens Centaur XP/Classic
	nmol/l	2.92	2.19	3.65	0.37	0.73	BioMerieux Vidas
	ng/ml	1.90	1.43	2.37	0.24	0.47	
	ng/dl	190	143	237	23.50	47.00	BioMerieux Vidas
	nmol/l	3.75	2.81	4.69	0.47	0.94	Roche Elecsys
	ng/ml	2.44	1.83	3.05	0.31	0.61	
	ng/dl	244	183	305	30.50	61.00	Roche Elecsys
	nmol/l	2.71	2.03	3.39	0.34	0.68	Tosoh AIA360
	ng/ml	1.76	1.32	2.20	0.22	0.44	
	ng/dl	176	132	220	22.00	44.00	Tosoh AIA360
	nmol/l	3.85	2.89	4.81	0.48	0.96	Vitros ECi
	ng/ml	2.51	1.88	3.14	0.32	0.63	
	ng/dl	251	188	314	31.50	63.00	Vitros ECi
	nmol/l	3.28	2.46	4.10	0.41	0.82	Roche Cobas E411
	ng/ml	2.14	1.60	2.68	0.27	0.54	
	ng/dl	214	160	268	27.00	54.00	Roche Cobas E411
	nmol/l	2.97	2.23	3.71	0.37	0.74	Roche Cobas 6000/8000
	ng/ml	1.93	1.45	2.41	0.24	0.48	
	ng/dl	193	145	241	24.00	48.00	Roche Cobas 6000/8000
Total T4	nmol/l	85.3	64.0	107	10.65	21.30	Abbott Architect
	µg/dl	6.65	4.99	8.31	0.83	1.66	
	ng/ml	66.5	49.9	83.1	8.30	16.60	Abbott Architect

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RANDOX

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Total T4	nmol/l	88.7	66.5	111	11.10	22.20	Abbott AXSYM
	µg/dl	6.92	5.19	8.65	0.87	1.73	
	ng/ml	69.2	51.9	86.5	8.65	17.30	Abbott AXSYM
	nmol/l	87.0	65.2	109	10.90	21.80	BioMerieux Vidas
	µg/dl	6.79	5.09	8.49	0.85	1.70	
	ng/ml	67.9	50.9	84.9	8.50	17.00	BioMerieux Vidas
	nmol/l	94.2	70.7	118	11.75	23.50	Siemens Immulite 1000
	µg/dl	7.35	5.51	9.19	0.92	1.84	
	ng/ml	73.5	55.1	91.9	9.20	18.40	Siemens Immulite 1000
	nmol/l	89.9	67.5	112	11.20	22.40	Siemens Immulite 2000/2500
	µg/dl	7.01	5.27	8.75	0.87	1.74	
	ng/ml	70.1	52.7	87.5	8.70	17.40	Siemens Immulite 2000/2500
	nmol/l	97.9	73.5	122	12.20	24.40	Roche Modular E170
	µg/dl	7.64	5.73	9.55	0.96	1.91	
	ng/ml	76.4	57.3	95.5	9.55	19.10	Roche Modular E170
	nmol/l	98.8	74.1	124	12.35	24.70	Roche Cobas E411
	µg/dl	7.71	5.78	9.64	0.97	1.93	
	ng/ml	77.1	57.8	96.4	9.65	19.30	Roche Cobas E411
	nmol/l	90.5	67.8	113	11.35	22.70	Roche Cobas 6000/8000
	µg/dl	7.06	5.29	8.83	0.89	1.77	
	ng/ml	70.6	52.9	88.3	8.85	17.70	Roche Cobas 6000/8000
	nmol/l	96.0	72.0	120	12.00	24.00	Microgenics DRI assay
	µg/dl	7.49	5.62	9.36	0.94	1.87	
	ng/ml	74.9	56.2	93.6	9.35	18.70	Microgenics DRI assay

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Transferrin	g/l	2.53	2.02	3.04	0.26	0.51	Immunoturbidimetric
	mg/dl	253	202	304	25.50	51.00	
Triglycerides	mmol/l	1.03	0.87	1.19	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.30	14.60	
	mmol/l	1.02	0.85	1.19	0.08	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	90.3	75.5	105	7.40	14.80	
	mmol/l	1.03	0.87	1.19	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	91.2	76.6	106	7.30	14.60	
	mmol/l	1.03	0.86	1.20	0.08	0.17	L/G kinase EP. 0.11 mmol/l correction
	mg/dl	91.2	76.2	106	7.50	15.00	
	mmol/l	0.97	0.82	1.13	0.08	0.16	Lipase/Glycerol Dehydrogenase
	mg/dl	85.9	72.1	99.7	6.90	13.80	
	mmol/l	1.10	0.93	1.27	0.09	0.17	Ortho Vitros Microslide Systems
	mg/dl	97.4	82.0	113	7.70	15.40	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.36	0.02	0.04	Ortho Vitros Microslide Systems
	mg/dl	5.41	4.70	6.12	0.36	0.71	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase catalase 340nm
	mg/dl	5.68	4.94	6.42	0.37	0.74	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.68	4.94	6.42	0.37	0.74	
	mmol/l	0.33	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.61	4.89	6.33	0.36	0.72	
	mmol/l	0.33	0.29	0.38	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.59	4.87	6.31	0.36	0.72	

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MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.73	4.97	6.49	0.38	0.76	
Urea	mmol/l	6.60	5.61	7.59	0.50	0.99	Ortho Vitros Microslide Systems
	mg/dl	39.7	33.7	45.7	3.00	6.00	
	mmol/l	7.17	6.09	8.25	0.54	1.08	Urease end point
	mg/dl	43.1	36.6	49.6	3.25	6.50	
	mmol/l	7.05	5.99	8.11	0.53	1.06	Urease kinetic
	mg/dl	42.4	36.0	48.8	3.20	6.40	
	mmol/l	6.86	5.83	7.89	0.52	1.03	Urease hypochlorite
	mg/dl	41.2	35.0	47.4	3.10	6.20	
	mmol/l	6.24	5.30	7.18	0.47	0.94	Urease Berthelot
	mg/dl	37.5	31.9	43.1	2.80	5.60	
	mmol/l	7.05	5.99	8.11	0.53	1.06	BUN
	mg/dl	19.8	16.8	22.8	1.50	3.00	
Vitamin B12	pmol/l	507	406	608	50.50	101.00	Roche Cobas E411
	pg/ml	687	550	824	68.50	137.00	
Zinc	µmol/l	29.7	23.8	35.6	2.95	5.90	Atomic absorption
	µg/dl	194	155	233	19.50	39.00	
	µmol/l	32.9	26.3	39.5	3.30	6.60	Colorimetric with deproteinisation
	µg/dl	215	172	258	21.50	43.00	

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MEAN OF ALL INSTRUMENTS (Elec.)

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
alpha-1-globulin		6.0	4.6	7.4	0.72	1.44	% of total Protein (Beckman Capillary)
alpha-2-globulin		5.2	4.0	6.5	0.63	1.25	% of total Protein (Beckman Capillary)
Albumin (electrophoresis)		61.2	55.1	67.3	3.05	6.10	% of total Protein (Beckman Capillary)
beta-globulin		13.8	10.5	17.1	1.65	3.30	% of total Protein (Beckman Capillary)
gamma-globulin		13.8	10.5	17.1	1.65	3.30	% of total Protein (Beckman Capillary)

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MINDRAY BS-200/300/400

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.31	0.61	
Alkaline Phosphatase	U/l	268	228	308	20.00	40.00	Diethanolamine buffer DEA 37°C
	U/l	209	178	240	15.50	31.00	Diethanolamine buffer DEA 30°C
	U/l	171	146	196	12.50	25.00	Diethanolamine buffer DEA 25°C
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
	U/l	30	24	36	3.00	6.00	Tris buffer without P5P 30°C
	U/l	23	18	28	2.50	5.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Direct	µmol/l	20.3	16.0	24.6	2.15	4.30	Diazo with Dichloroaniline (DCA)
	mg/dl	1.19	0.936	1.44	0.13	0.25	
Calcium	mmol/l	2.24	2.02	2.46	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.98	8.10	9.86	0.44	0.88	
	mmol/l	2.26	2.03	2.49	0.12	0.23	Arsenazo III
	mg/dl	9.06	8.14	9.98	0.46	0.92	
Cholesterol	mmol/l	4.36	3.80	4.92	0.28	0.56	Cholesterol Oxidase
	mg/dl	168	147	189	10.50	21.00	
CK Total	U/l	188	154	222	17.00	34.00	CK-NAC (IFCC) 37°C
	U/l	118	96	140	11.00	22.00	CK-NAC (IFCC) 30°C
	U/l	80	65	95	7.50	15.00	CK-NAC (IFCC) 25°C

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MINDRAY BS-200/300/400

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	118	94.3	142	11.85	23.70	Alkaline picrate no deproteinization
	mg/dl	1.33	1.07	1.59	0.13	0.26	
	µmol/l	117	93.7	140	11.65	23.30	Randox Enzymatic UV method
	mg/dl	1.32	1.06	1.58	0.13	0.26	
	µmol/l	121	96.5	146	12.25	24.50	Jaffe rate blanked
	mg/dl	1.37	1.09	1.65	0.14	0.28	
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	41	35	47	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	32	27	37	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.51	5.53	7.49	0.49	0.98	Glucose oxidase
	mg/dl	117	99.7	134	8.65	17.30	
HDL - Cholesterol	mmol/l	1.37	1.16	1.58	0.11	0.21	Direct HDL PPD
	mg/dl	52.9	44.8	61.0	4.05	8.10	
	mmol/l	1.35	1.15	1.55	0.10	0.20	Direct Clearance Method
	mg/dl	52.1	44.4	59.8	3.85	7.70	
Iron	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	µg/dl	112	91.7	132	10.15	20.30	
LD (LDH)	U/l	430	365	495	32.50	65.00	P->L SFBC 37°C
	U/l	310	264	356	23.00	46.00	P->L SFBC 30°C
	U/l	218	185	251	16.50	33.00	P->L SFBC 25°C
Magnesium	mmol/l	0.87	0.77	0.98	0.05	0.11	Xylidyl Blue
	mg/dl	2.12	1.86	2.38	0.13	0.26	
Phosphate Inorganic	mmol/l	1.54	1.31	1.77	0.12	0.23	Phosphomolybdate UV
	mg/dl	4.77	4.06	5.48	0.36	0.71	

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MINDRAY BS-200/300/400

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Potassium	mmol/l	3.89	3.58	4.20	0.16	0.31	ISE method - direct
Protein Total	g/l	62.2	49.8	74.6	6.20	12.40	Biuret reaction end point
	g/dl	6.22	4.98	7.46	0.62	1.24	
Sodium	mmol/l	138	131	145	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.07	0.90	1.24	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	94.7	79.3	110	7.70	15.40	
Uric Acid (Urate)	mmol/l	0.37	0.32	0.42	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	6.20	5.39	7.01	0.41	0.81	
	mmol/l	0.37	0.32	0.42	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	6.25	5.44	7.06	0.41	0.81	
	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.76	5.01	6.51	0.38	0.75	
Urea	mmol/l	7.57	6.43	8.71	0.57	1.14	Urease end point
	mg/dl	45.5	38.6	52.4	3.45	6.90	
	mmol/l	7.33	6.23	8.43	0.55	1.10	Urease kinetic
	mg/dl	44.1	37.4	50.8	3.35	6.70	
	mmol/l	7.48	6.36	8.60	0.56	1.12	Urease hypochlorite
	mg/dl	45.0	38.2	51.8	3.40	6.80	
	mmol/l	7.33	6.23	8.43	0.55	1.10	BUN
	mg/dl	20.6	17.5	23.7	1.55	3.10	

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RANDOX

PRESTIGE 24i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.9	33.9	45.9	3.00	6.00	Bromocresol Green
	g/dl	3.99	3.39	4.59	0.30	0.60	
Alkaline Phosphatase	U/l	260	221	299	19.50	39.00	Diethanolamine buffer DEA 37°C
	U/l	203	172	234	15.50	31.00	Diethanolamine buffer DEA 30°C
	U/l	166	141	191	12.50	25.00	Diethanolamine buffer DEA 25°C
ALT (GPT)	U/l	38	31	45	3.50	7.00	Tris buffer without P5P 37°C
	U/l	28	23	33	2.50	5.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Direct	µmol/l	20.9	16.5	25.3	2.20	4.40	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.22	0.965	1.48	0.13	0.26	
Bilirubin Total	µmol/l	31.3	24.7	37.9	3.30	6.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.83	1.44	2.22	0.20	0.39	
Calcium	mmol/l	2.24	2.01	2.47	0.12	0.23	Arsenazo III
	mg/dl	8.98	8.06	9.90	0.46	0.92	
Cholesterol	mmol/l	4.27	3.72	4.82	0.28	0.55	Cholesterol Oxidase
	mg/dl	165	144	186	10.50	21.00	
CK Total	U/l	196	160	232	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	123	100	146	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	83	68	98	7.50	15.00	CK-NAC (IFCC) 25°C

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PRESTIGE 24i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	114	91.3	137	11.35	22.70	Alkaline picrate no deproteinization
	mg/dl	1.29	1.03	1.55	0.13	0.26	
gamma-GT	U/l	47	40	54	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	37	32	42	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	29	25	33	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
Glucose	mmol/l	6.31	5.36	7.26	0.48	0.95	Glucose oxidase
	mg/dl	114	96.6	131	8.70	17.40	
HDL - Cholesterol	mmol/l	1.08	0.91	1.25	0.08	0.17	Direct HDL Immunoseparation
	mg/dl	41.7	35.3	48.1	3.20	6.40	
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Biuret reaction end point
	g/dl	6.00	4.80	7.20	0.60	1.20	
Triglycerides	mmol/l	0.99	0.83	1.15	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	87.8	73.7	102	7.05	14.10	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.53	4.80	6.26	0.37	0.73	
	mmol/l	0.33	0.28	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.48	4.77	6.19	0.36	0.71	
Urea	mmol/l	6.91	5.87	7.95	0.52	1.04	Urease kinetic
	mg/dl	41.5	35.3	47.7	3.10	6.20	
	mmol/l	6.91	5.87	7.95	0.52	1.04	BUN
	mg/dl	19.4	16.5	22.3	1.45	2.90	

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Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Green
	g/dl	4.00	3.40	4.60	0.30	0.60	
	g/l	39.4	33.5	45.3	2.95	5.90	Bromocresol Purple
	g/dl	3.94	3.35	4.53	0.30	0.59	
	g/l	37.9	32.3	43.5	2.80	5.60	Turbidimetric Assays
	g/dl	3.79	3.23	4.35	0.28	0.56	
Alkaline Phosphatase	U/l	136	116	156	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	106	90	122	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	87	74	100	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
	U/l	35	28	42	3.50	7.00	Tris buffer SCE 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer SCE 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer SCE 25°C
Amylase Pancreatic	U/l	60	51	69	4.50	9.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	89	76	102	6.50	13.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	88	75	101	6.50	13.00	Other Roche 2-chloro-pNPG7 37°C
	U/l	87	74	100	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bile Acids	µmol/l	26.1	20.9	31.3	2.60	5.20	Enzymatic Colorimetric
Bicarbonate	mmol/l	13.7	10.9	16.5	1.40	2.80	Colorimetric
	mmol/l	13.7	10.9	16.5	1.40	2.80	Enzymatic
Bilirubin Direct	µmol/l	21.8	17.2	26.4	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.28	1.01	1.55	0.14	0.27	
	µmol/l	22.3	17.6	27.0	2.35	4.70	Diazo with Sulphanilic Acid
	mg/dl	1.30	1.03	1.57	0.14	0.27	
	µmol/l	21.7	17.2	26.2	2.25	4.50	Diazo with Dichloroaniline (DCA)
	mg/dl	1.27	1.01	1.53	0.13	0.26	
Bilirubin Total	µmol/l	27.3	21.6	33.0	2.85	5.70	Diazo with Sulphanilic Acid
	mg/dl	1.60	1.26	1.94	0.17	0.34	
	µmol/l	26.7	21.1	32.3	2.80	5.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.56	1.23	1.89	0.17	0.33	
	µmol/l	27.5	21.7	33.3	2.90	5.80	Diazonium ion
	mg/dl	1.61	1.27	1.95	0.17	0.34	
Calcium	mmol/l	2.22	2.00	2.44	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.90	8.02	9.78	0.44	0.88	
	mmol/l	2.22	2.00	2.44	0.11	0.22	NM-BAPTA
	mg/dl	8.90	8.02	9.78	0.44	0.88	
Cholesterol	mmol/l	4.33	3.77	4.89	0.28	0.56	Cholesterol Oxidase
	mg/dl	167	146	188	10.50	21.00	
Chloride	mmol/l	93.9	86.3	102	3.80	7.60	ISE indirect
Cholinesterase	U/l	6814	5451	8177	681.50	1363.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	205	168	242	18.50	37.00	CK-NAC substrate start (DGKC) 37°C
	U/l	128	105	151	11.50	23.00	CK-NAC substrate start (DGKC) 30°C
	U/l	87	71	103	8.00	16.00	CK-NAC substrate start (DGKC) 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
CK Total	U/l	206	169	243	18.50	37.00	CK-NAC (IFCC) 37°C
	U/l	129	106	152	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	88	72	104	8.00	16.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	124	99.2	149	12.40	24.80	Alkaline picrate no deproteinization
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	128	102	154	13.00	26.00	Randox Enzymatic UV method
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	128	102	154	13.00	26.00	Creatinine PAP method
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	127	102	152	12.50	25.00	Roche Creatinine Plus
	mg/dl	1.44	1.15	1.73	0.15	0.29	
	µmol/l	124	99.5	149	12.25	24.50	Jaffe rate blanked
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	124	98.8	149	12.60	25.20	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	123	98.4	148	12.30	24.60	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.39	1.11	1.67	0.14	0.28	
D-3-Hydroxybutyrate	mmol/l	0.27	0.23	0.31	0.02	0.04	Tris buffer 100mmol pH 8.5
Free T4	pmol/l	19.4	14.5	24.3	2.45	4.90	Roche Cobas 6000/8000
	ng/dl	1.51	1.13	1.89	0.19	0.38	
	pg/ml	15.1	11.3	18.9	1.90	3.80	Roche Cobas 6000/8000
gamma-GT	U/l	48	40	56	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	32	44	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	25	35	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	43	36	50	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.11	5.20	7.02	0.46	0.91	Hexokinase
	mg/dl	110	93.7	126	8.15	16.30	
	mmol/l	6.11	5.20	7.02	0.46	0.91	Glucose oxidase
	mg/dl	110	93.7	126	8.15	16.30	
HDL - Cholesterol	mmol/l	1.15	0.98	1.32	0.09	0.17	Direct HDL PEGME
	mg/dl	44.4	37.8	51.0	3.30	6.60	
	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct HDL Roche 3rd generation
	mg/dl	45.9	39.0	52.8	3.45	6.90	
Iron	µmol/l	19.6	16.1	23.1	1.75	3.50	Colorimetric with ppt.
	µg/dl	110	90.0	130	10.00	20.00	
	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	µg/dl	112	91.7	132	10.15	20.30	
Lactate	mmol/l	1.47	1.20	1.74	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LD (LDH)	U/l	442	376	508	33.00	66.00	P->L German methods 37°C
	U/l	319	271	367	24.00	48.00	P->L German methods 30°C
	U/l	224	191	257	16.50	33.00	P->L German methods 25°C
	U/l	446	379	513	33.50	67.00	P->L SFBC 37°C
	U/l	322	274	370	24.00	48.00	P->L SFBC 30°C
	U/l	226	192	260	17.00	34.00	P->L SFBC 25°C
	U/l	224	190	258	17.00	34.00	L->P IFCC 37°C
	U/l	162	137	187	12.50	25.00	L->P IFCC 30°C
	U/l	114	96	132	9.00	18.00	L->P IFCC 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Lipase	U/l	36	29	43	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.97	0.86	1.09	0.06	0.12	Ion selective electrode
	mg/dl	0.676	0.595	0.757	0.04	0.08	
	mmol/l	0.96	0.84	1.07	0.06	0.12	Spectrophotometric
	mg/dl	0.666	0.586	0.746	0.04	0.08	
Magnesium	mmol/l	0.89	0.78	0.99	0.05	0.11	Xylidyl Blue
	mg/dl	2.15	1.89	2.41	0.13	0.26	
	mmol/l	0.88	0.77	0.99	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.14	1.88	2.40	0.13	0.26	
Osmolality	mOsm/kg	290	232	348	29.00	58.00	Calculated
Phosphate Inorganic	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.28	3.63	4.93	0.33	0.65	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.94	3.63	4.25	0.16	0.31	ISE method - indirect
Protein Total	g/l	59.6	47.7	71.5	5.95	11.90	Biuret reaction end point
	g/dl	5.96	4.77	7.15	0.60	1.19	
	g/l	58.8	47.0	70.6	5.90	11.80	Biuret reaction kinetic
	g/dl	5.88	4.70	7.06	0.59	1.18	
PSA Total	ng/ml =	19.6	14.7	24.5	2.45	4.90	Roche Cobas 6000/8000
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone	µU/ml =	1.83	1.47	2.19	0.18	0.36	Roche Cobas 6000/8000
TIBC	µmol/l	49.5	39.1	59.9	5.20	10.40	FE+UIBC(saturation with iron)
	µg/dl	277	219	335	29.00	58.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
TIBC	µmol/l	50.9	40.2	61.6	5.35	10.70	Direct Colorimetric
	µg/dl	285	225	345	30.00	60.00	
Total T3	nmol/l	2.97	2.23	3.71	0.37	0.74	Roche Cobas 6000/8000
	ng/ml	1.93	1.45	2.41	0.24	0.48	
	ng/dl	193	145	241	24.00	48.00	Roche Cobas 6000/8000
Total T4	nmol/l	90.5	67.8	113	11.35	22.70	Roche Cobas 6000/8000
	µg/dl	7.06	5.29	8.83	0.89	1.77	
	ng/ml	70.6	52.9	88.3	8.85	17.70	Roche Cobas 6000/8000
Triglycerides	mmol/l	1.03	0.87	1.20	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	91.2	76.6	106	7.30	14.60	
	mmol/l	1.04	0.87	1.21	0.08	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	92.0	77.3	107	7.35	14.70	
	mmol/l	1.01	0.85	1.17	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	89.4	75.0	104	7.20	14.40	
	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/Glycerol Dehydrogenase
	mg/dl	89.4	75.3	104	7.05	14.10	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.54	4.82	6.26	0.36	0.72	
	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.53	4.82	6.24	0.36	0.71	
	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.56	4.84	6.28	0.36	0.72	
Urea	mmol/l	6.64	5.64	7.64	0.50	1.00	Urease end point
	mg/dl	39.9	33.9	45.9	3.00	6.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Urea	mmol/l	6.87	5.84	7.90	0.52	1.03	Urease kinetic
	mg/dl	41.3	35.1	47.5	3.10	6.20	
	mmol/l	6.87	5.84	7.90	0.52	1.03	BUN
	mg/dl	19.3	16.4	22.4	1.45	2.90	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.8	34.7	46.9	3.05	6.10	Bromocresol Green
	g/dl	4.08	3.47	4.69	0.31	0.61	
Alkaline Phosphatase	U/l	131	111	151	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	102	86	118	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	84	71	97	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Amylase Total	U/l	89	75	103	7.00	14.00	pNP Maltotrioside substrates 37°C
	U/l	90	76	104	7.00	14.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	20	28	2.00	4.00	Tris buffer without P5P 30°C
	U/l	17	14	20	1.50	3.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.5	10.7	16.3	1.40	2.80	Enzymatic
Bilirubin Direct	µmol/l	21.7	17.2	26.2	2.25	4.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.27	1.01	1.53	0.13	0.26	
Bilirubin Total	µmol/l	27.8	22.0	33.6	2.90	5.80	Diazo with Sulphanilic Acid
	mg/dl	1.63	1.29	1.97	0.17	0.34	
	µmol/l	28.0	22.1	33.9	2.95	5.90	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.64	1.29	1.99	0.18	0.35	
	µmol/l	27.8	21.9	33.7	2.95	5.90	Diazonium ion
	mg/dl	1.63	1.28	1.98	0.18	0.35	

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Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.17	1.95	2.39	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.70	7.82	9.58	0.44	0.88	
	mmol/l	2.20	1.98	2.42	0.11	0.22	NM-BAPTA
	mg/dl	8.82	7.94	9.70	0.44	0.88	
Cholesterol	mmol/l	4.43	3.86	5.00	0.29	0.57	Cholesterol Oxidase
	mg/dl	171	149	193	11.00	22.00	
Chloride	mmol/l	100	92.0	108	4.00	8.00	ISE indirect
CK Total	U/l	201	165	237	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	126	103	149	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	85	70	100	7.50	15.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	119	94.9	143	12.05	24.10	Alkaline picrate no deproteinization
	mg/dl	1.34	1.07	1.61	0.14	0.27	
	µmol/l	119	95.5	143	11.75	23.50	Roche Creatinine Plus
	mg/dl	1.34	1.08	1.60	0.13	0.26	
	µmol/l	116	93.1	139	11.45	22.90	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.31	1.05	1.57	0.13	0.26	
gamma-GT	U/l	53	45	61	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	35	49	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.23	5.29	7.17	0.47	0.94	Hexokinase
	mg/dl	112	95.3	129	8.35	16.70	
	mmol/l	6.36	5.40	7.32	0.48	0.96	Glucose oxidase
	mg/dl	115	97.3	133	8.85	17.70	
HDL - Cholesterol	mmol/l	1.21	1.03	1.39	0.09	0.18	Direct HDL PEGME
	mg/dl	46.7	39.8	53.6	3.45	6.90	

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Roche Cobas C111®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.18	1.01	1.35	0.09	0.17	Direct HDL Roche 3rd generation
	mg/dl	45.5	39.0	52.0	3.25	6.50	
LD (LDH)	U/l	440	374	506	33.00	66.00	P->L German methods 37°C
	U/l	318	270	366	24.00	48.00	P->L German methods 30°C
	U/l	223	190	256	16.50	33.00	P->L German methods 25°C
	U/l	231	196	266	17.50	35.00	L->P IFCC 37°C
	U/l	167	142	192	12.50	25.00	L->P IFCC 30°C
	U/l	117	99	135	9.00	18.00	L->P IFCC 25°C
Magnesium	mmol/l	0.88	0.78	0.99	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.14	1.88	2.40	0.13	0.26	
Phosphate Inorganic	mmol/l	1.39	1.18	1.60	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.31	3.66	4.96	0.33	0.65	
	mmol/l	1.45	1.23	1.67	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.50	3.81	5.19	0.35	0.69	
Potassium	mmol/l	3.89	3.58	4.20	0.16	0.31	ISE method - indirect
Protein Total	g/l	59.5	47.6	71.4	5.95	11.90	Biuret reaction end point
	g/dl	5.95	4.76	7.14	0.60	1.19	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.02	0.86	1.18	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	90.3	76.0	105	7.15	14.30	
	mmol/l	1.01	0.85	1.17	0.08	0.16	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	89.4	75.3	104	7.05	14.10	
	mmol/l	1.00	0.84	1.16	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	88.5	74.4	103	7.05	14.10	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.68	4.94	6.42	0.37	0.74	
	mmol/l	0.33	0.28	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.49	4.77	6.21	0.36	0.72	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.73	4.99	6.47	0.37	0.74	
Urea	mmol/l	6.88	5.84	7.92	0.52	1.04	Urease kinetic
	mg/dl	41.3	35.1	47.5	3.10	6.20	
	mmol/l	6.88	5.85	7.91	0.52	1.03	BUN
	mg/dl	19.3	16.4	22.2	1.45	2.90	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.9	33.9	45.9	3.00	6.00	Bromocresol Green
	g/dl	3.99	3.39	4.59	0.30	0.60	
	g/l	39.4	33.5	45.3	2.95	5.90	Bromocresol Purple
	g/dl	3.94	3.35	4.53	0.30	0.59	
Alkaline Phosphatase	U/l	135	114	156	10.50	21.00	Roche Integra AMP buffer 37°C
	U/l	105	89	121	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	86	73	99	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	34	28	40	3.00	6.00	Tris buffer without P5P 37°C
	U/l	25	21	29	2.00	4.00	Tris buffer without P5P 30°C
	U/l	19	16	22	1.50	3.00	Tris buffer without P5P 25°C
Amylase Total	U/l	88	75	101	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	37	29	45	4.00	8.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.6	10.8	16.4	1.40	2.80	Enzymatic
Bilirubin Direct	µmol/l	22.7	17.9	27.5	2.40	4.80	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.33	1.05	1.61	0.14	0.28	
	µmol/l	22.0	17.4	26.6	2.30	4.60	Diazo with Sulphanilic Acid
	mg/dl	1.29	1.02	1.56	0.14	0.27	
	µmol/l	21.9	17.3	26.5	2.30	4.60	Diazo with Dichloroaniline (DCA)
	mg/dl	1.28	1.01	1.55	0.14	0.27	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Bilirubin Total	µmol/l	26.8	21.2	32.4	2.80	5.60	Diazo with Sulphanilic Acid
	mg/dl	1.57	1.24	1.90	0.17	0.33	
	µmol/l	26.8	21.2	32.4	2.80	5.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.57	1.24	1.90	0.17	0.33	
	µmol/l	27.1	21.4	32.8	2.85	5.70	Diazonium ion
	mg/dl	1.59	1.25	1.93	0.17	0.34	
Calcium	mmol/l	2.23	2.01	2.45	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.94	8.06	9.82	0.44	0.88	
	mmol/l	2.31	2.08	2.54	0.12	0.23	Arsenazo III
	mg/dl	9.26	8.34	10.2	0.46	0.92	
	mmol/l	2.23	2.00	2.46	0.12	0.23	NM-BAPTA
	mg/dl	8.94	8.02	9.86	0.46	0.92	
Cholesterol	mmol/l	4.33	3.77	4.89	0.28	0.56	Cholesterol Oxidase
	mg/dl	167	146	188	10.50	21.00	
Chloride	mmol/l	94.6	87.1	102	3.75	7.50	ISE indirect
CK Total	U/l	209	171	247	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	131	107	155	12.00	24.00	CK-NAC (IFCC) 30°C
	U/l	89	73	105	8.00	16.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	125	99.9	150	12.55	25.10	Alkaline picrate no deproteinization
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	128	102	154	13.00	26.00	Randox Enzymatic UV method
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	129	103	155	13.00	26.00	Roche Creatinine Plus
	mg/dl	1.46	1.16	1.76	0.15	0.30	
	µmol/l	126	101	151	12.50	25.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.42	1.14	1.70	0.14	0.28	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
gamma-GT	U/l	49	42	56	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	39	33	45	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	26	34	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	43	36	50	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.16	5.24	7.08	0.46	0.92	Hexokinase
	mg/dl	111	94.4	128	8.30	16.60	
	mmol/l	6.09	5.17	7.01	0.46	0.92	Glucose oxidase
	mg/dl	110	93.2	127	8.40	16.80	
HDL - Cholesterol	mmol/l	1.17	0.99	1.35	0.09	0.18	Direct HDL Roche 3rd generation
	mg/dl	45.2	38.3	52.1	3.45	6.90	
Iron	µmol/l	19.7	16.2	23.2	1.75	3.50	Colorimetric without ppt.
	µg/dl	110	90.6	129	9.70	19.40	
Lactate	mmol/l	1.55	1.27	1.83	0.14	0.28	Colorimetric Lactate Oxidase
	mg/dl	14.0	11.4	16.6	1.30	2.60	
LD (LDH)	U/l	449	382	516	33.50	67.00	P->L German methods 37°C
	U/l	324	276	372	24.00	48.00	P->L German methods 30°C
	U/l	228	194	262	17.00	34.00	P->L German methods 25°C
	U/l	224	191	257	16.50	33.00	L->P IFCC 37°C
	U/l	162	138	186	12.00	24.00	L->P IFCC 30°C
	U/l	114	97	131	8.50	17.00	L->P IFCC 25°C
Lipase	U/l	36	29	43	3.50	7.00	Roche Colorimetric 37°C
Magnesium	mmol/l	0.88	0.78	0.99	0.05	0.11	Xylidyl Blue
	mg/dl	2.14	1.88	2.40	0.13	0.26	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Magnesium	mmol/l	0.89	0.78	1.00	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Phosphate Inorganic	mmol/l	1.39	1.18	1.60	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.31	3.66	4.96	0.33	0.65	
	mmol/l	1.37	1.17	1.57	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.25	3.63	4.87	0.31	0.62	
Potassium	mmol/l	3.96	3.65	4.27	0.16	0.31	ISE method - indirect
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Biuret reaction end point
	g/dl	6.00	4.80	7.20	0.60	1.20	
	g/l	61.0	48.8	73.2	6.10	12.20	Biuret reaction kinetic
	g/dl	6.10	4.88	7.32	0.61	1.22	
Sodium	mmol/l	144	136	152	4.00	8.00	ISE method - indirect
TIBC	µmol/l	51.5	40.7	62.3	5.40	10.80	FE+UIBC(saturation with iron)
	µg/dl	288	228	348	30.00	60.00	
Triglycerides	mmol/l	1.02	0.86	1.18	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	90.3	76.1	105	7.10	14.20	
	mmol/l	1.05	0.88	1.22	0.09	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	92.9	77.7	108	7.60	15.20	
	mmol/l	1.01	0.85	1.18	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	89.4	74.8	104	7.30	14.60	
	mmol/l	1.08	0.91	1.25	0.09	0.17	L/G kinase EP. 0.11 mmol/l correction
	mg/dl	95.6	80.2	111	7.70	15.40	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.63	4.89	6.37	0.37	0.74	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

Analyte	unit	target	Range low	Range high	1SD	2SD	methods
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.66	4.94	6.38	0.36	0.72	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.66	4.92	6.40	0.37	0.74	
Urea	mmol/l	7.03	5.98	8.08	0.53	1.05	Urease kinetic
	mg/dl	42.3	35.9	48.7	3.20	6.40	
	mmol/l	7.03	5.98	8.08	0.53	1.05	BUN
	mg/dl	19.7	16.7	22.7	1.50	3.00	

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Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.9	34.0	45.8	2.95	5.90	Bromocresol Green
	g/dl	3.99	3.40	4.58	0.30	0.59	
Alkaline Phosphatase	U/l	124	105	143	9.50	19.00	Roche Integra AMP buffer 37°C
	U/l	97	82	112	7.50	15.00	Roche Integra AMP buffer 30°C
	U/l	79	67	91	6.00	12.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	59	50	68	4.50	9.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	87	74	100	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	14.0	11.1	16.9	1.45	2.90	Enzymatic
Bilirubin Direct	µmol/l	21.9	17.3	26.5	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.28	1.01	1.55	0.14	0.27	
Bilirubin Total	µmol/l	26.3	20.8	31.8	2.75	5.50	Diazo with Sulphanilic Acid
	mg/dl	1.54	1.22	1.86	0.16	0.32	
	µmol/l	26.6	21.0	32.2	2.80	5.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.56	1.23	1.89	0.17	0.33	
	µmol/l	26.8	21.2	32.4	2.80	5.60	Diazonium ion
	mg/dl	1.57	1.24	1.90	0.17	0.33	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Calcium	mmol/l	2.21	1.99	2.43	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.86	7.98	9.74	0.44	0.88	
	mmol/l	2.21	1.99	2.43	0.11	0.22	NM-BAPTA
	mg/dl	8.86	7.98	9.74	0.44	0.88	
Cholesterol	mmol/l	4.28	3.72	4.84	0.28	0.56	Cholesterol Oxidase
	mg/dl	165	144	186	10.50	21.00	
Chloride	mmol/l	94.5	86.9	102	3.80	7.60	ISE indirect
CK Total	U/l	185	152	218	16.50	33.00	CK-NAC (IFCC) 37°C
	U/l	116	95	137	10.50	21.00	CK-NAC (IFCC) 30°C
	U/l	79	65	93	7.00	14.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	133	106	160	13.50	27.00	Roche Creatinine Plus
	mg/dl	1.50	1.20	1.80	0.15	0.30	
	µmol/l	126	101	151	12.50	25.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.42	1.14	1.70	0.14	0.28	
gamma-GT	U/l	47	40	54	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	37	32	42	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	29	25	33	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	53	45	61	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	35	49	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.03	5.13	6.93	0.45	0.90	Hexokinase
	mg/dl	109	92.4	126	8.30	16.60	
HDL - Cholesterol	mmol/l	1.14	0.97	1.31	0.09	0.17	Direct HDL Roche 3rd generation
	mg/dl	44.0	37.4	50.6	3.30	6.60	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

Analyte	unit	target	Range low	Range high	1SD	2SD	methods
Iron	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.3	128	9.85	19.70	
Lactate	mmol/l	1.45	1.19	1.71	0.13	0.26	Colorimetric Lactate Oxidase
	mg/dl	13.1	10.7	15.5	1.20	2.40	
LD (LDH)	U/l	223	190	256	16.50	33.00	L->P IFCC 37°C
	U/l	161	137	185	12.00	24.00	L->P IFCC 30°C
	U/l	113	96	130	8.50	17.00	L->P IFCC 25°C
Lipase	U/l	37	30	44	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.98	0.86	1.09	0.06	0.12	Spectrophotometric
	mg/dl	0.678	0.596	0.760	0.04	0.08	
Magnesium	mmol/l	0.87	0.77	0.97	0.05	0.10	Xylidyl Blue
	mg/dl	2.11	1.86	2.36	0.13	0.25	
Phosphate Inorganic	mmol/l	1.34	1.14	1.54	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.15	3.53	4.77	0.31	0.62	
Potassium	mmol/l	3.99	3.67	4.31	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.3	47.4	71.2	5.95	11.90	Biuret reaction end point
	g/dl	5.93	4.74	7.12	0.60	1.19	
Sodium	mmol/l	144	136	152	4.00	8.00	ISE method - indirect
TIBC	µmol/l	49.9	39.4	60.4	5.25	10.50	FE+UIBC(saturation with iron)
	µg/dl	279	220	338	29.50	59.00	
Triglycerides	mmol/l	1.01	0.84	1.18	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	89.4	74.7	104	7.35	14.70	
	mmol/l	1.01	0.85	1.18	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	89.4	74.8	104	7.30	14.60	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.37	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.43	4.72	6.14	0.36	0.71	

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RANDOX

Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.49	4.79	6.19	0.35	0.70	
	mmol/l	0.33	0.28	0.37	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.46	4.75	6.17	0.36	0.71	
Urea	mmol/l	6.73	5.72	7.74	0.51	1.01	Urease kinetic
	mg/dl	40.4	34.4	46.4	3.00	6.00	
	mmol/l	6.73	5.72	7.74	0.51	1.01	BUN
	mg/dl	18.9	16.1	21.7	1.40	2.80	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.1	33.3	44.9	2.90	5.80	Bromocresol Green
	g/dl	3.91	3.33	4.49	0.29	0.58	
Alkaline Phosphatase	U/l	309	263	355	23.00	46.00	Diethanolamine buffer DEA 37°C
	U/l	174	148	200	13.00	26.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	69	59	79	5.00	10.00	Randox liquid stable pNPG7 37°C
Amylase Total	U/l	100	85	115	7.50	15.00	Randox liquid stable pNPG7 37°C
AST (GOT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P 37°C
Bile Acids	µmol/l	24.5	19.6	29.4	2.45	4.90	5th Generation Colorimetric
Bicarbonate	mmol/l	14.4	11.4	17.4	1.50	3.00	Enzymatic
Bilirubin Direct	µmol/l	22.7	17.9	27.5	2.40	4.80	Diazo with Sulphanilic Acid
	mg/dl	1.33	1.05	1.61	0.14	0.28	
	µmol/l	20.9	16.5	25.3	2.20	4.40	Vanadate Oxidation
	mg/dl	1.22	0.965	1.48	0.13	0.26	
Bilirubin Total	µmol/l	34.4	27.2	41.6	3.60	7.20	Diazo with Sulphanilic Acid
	mg/dl	2.01	1.59	2.43	0.21	0.42	
	µmol/l	30.7	24.3	37.1	3.20	6.40	Vanadate Oxidation
	mg/dl	1.80	1.42	2.18	0.19	0.38	
Calcium	mmol/l	2.30	2.07	2.53	0.12	0.23	Arsenazo III
	mg/dl	9.22	8.30	10.1	0.46	0.92	
Cholesterol	mmol/l	4.39	3.82	4.96	0.29	0.57	Cholesterol Oxidase
	mg/dl	169	147	191	11.00	22.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Chloride	mmol/l	97.9	90.0	106	3.95	7.90	ISE direct
CK Total	U/l	203	166	240	18.50	37.00	CK-NAC substrate start (DGKC) 37°C
	U/l	220	180	260	20.00	40.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	121	97.2	145	11.90	23.80	Alkaline picrate no deproteinization
	mg/dl	1.37	1.10	1.64	0.14	0.27	
	µmol/l	123	98.4	148	12.30	24.60	Randox Enzymatic UV method
	mg/dl	1.39	1.11	1.67	0.14	0.28	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.36	5.41	7.31	0.48	0.95	Hexokinase
	mg/dl	115	97.5	133	8.75	17.50	
	mmol/l	6.45	5.48	7.42	0.49	0.97	Glucose oxidase
	mg/dl	116	98.7	133	8.65	17.30	
Iron	µmol/l	20.7	17.0	24.4	1.85	3.70	Colorimetric without ppt.
	µg/dl	116	95.0	137	10.50	21.00	
Lactate	mmol/l	1.44	1.18	1.70	0.13	0.26	Colorimetric Lactate Oxidase
	mg/dl	13.0	10.6	15.4	1.20	2.40	
LD (LDH)	U/l	443	376	510	33.50	67.00	P->L German methods 37°C
	U/l	239	203	275	18.00	36.00	L->P IFCC 37°C
Lipase	U/l	41	33	49	4.00	8.00	Randox Colorimetric 37°C
Lithium	mmol/l	0.90	0.80	1.01	0.05	0.11	Colorimetric
	mg/dl	0.627	0.552	0.702	0.04	0.08	
Magnesium	mmol/l	0.91	0.80	1.02	0.05	0.11	Xylidyl Blue
	mg/dl	2.22	1.95	2.49	0.14	0.27	
Phosphate Inorganic	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.28	3.63	4.93	0.33	0.65	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Potassium	mmol/l	3.94	3.62	4.26	0.16	0.32	Enzymatic
	mmol/l	3.92	3.61	4.23	0.16	0.31	ISE method - direct
Protein Total	g/l	60.3	48.3	72.3	6.00	12.00	Biuret reaction end point
	g/dl	6.03	4.83	7.23	0.60	1.20	
Sodium	mmol/l	147	140	154	3.50	7.00	Enzymatic
	mmol/l	144	137	151	3.50	7.00	ISE method - direct
TIBC	µmol/l	56.1	44.3	67.9	5.90	11.80	Direct Colorimetric
	µg/dl	314	248	380	33.00	66.00	
Triglycerides	mmol/l	1.04	0.87	1.21	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	92.0	77.3	107	7.35	14.70	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.61	4.89	6.33	0.36	0.72	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.64	4.92	6.36	0.36	0.72	
Urea	mmol/l	7.04	5.98	8.10	0.53	1.06	Urease kinetic
	mg/dl	42.3	35.9	48.7	3.20	6.40	
	mmol/l	7.04	5.98	8.10	0.53	1.06	BUN
	mg/dl	19.8	16.8	22.8	1.50	3.00	

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SIEMENS ADVIA 1200/1650/2400®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	38.7	32.9	44.5	2.90	5.80	Bromocresol Green
	g/dl	3.87	3.29	4.45	0.29	0.58	
	g/l	41.2	35.0	47.4	3.10	6.20	Bromocresol Purple
	g/dl	4.12	3.50	4.74	0.31	0.62	
Alkaline Phosphatase	U/l	253	215	291	19.00	38.00	Diethanolamine buffer DEA 37°C
	U/l	180	153	207	13.50	27.00	AMP optimised to IFCC 37°C
	U/l	180	153	207	13.50	27.00	AMP non-optimised 37°C
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	63	53	73	5.00	10.00	Immunoinhibition EPS substrate 37°C
Amylase Total	U/l	89	75	103	7.00	14.00	Siemens - blocked pNPG7 37°C
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	15.4	12.2	18.6	1.60	3.20	Enzymatic
Bilirubin Direct	µmol/l	19.3	15.3	23.3	2.00	4.00	Oxidation to Biliverdin
	mg/dl	1.13	0.895	1.37	0.12	0.24	
Bilirubin Total	µmol/l	31.5	24.9	38.1	3.30	6.60	Oxidation to Biliverdin
	mg/dl	1.84	1.46	2.22	0.19	0.38	
Calcium	mmol/l	2.20	1.98	2.42	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.22	1.99	2.45	0.12	0.23	Arsenazo III
	mg/dl	8.90	7.98	9.82	0.46	0.92	
Cholesterol	mmol/l	4.22	3.67	4.77	0.28	0.55	Cholesterol Oxidase
	mg/dl	163	142	184	10.50	21.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Chloride	mmol/l	100	92.2	108	3.90	7.80	ISE indirect
CK Total	U/l	190	156	224	17.00	34.00	CK-NAC substrate start (DGKC) 37°C
	U/l	193	158	228	17.50	35.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	123	98.7	147	12.15	24.30	Alkaline picrate no deproteinization
	mg/dl	1.39	1.12	1.66	0.14	0.27	
	µmol/l	119	95.0	143	12.00	24.00	Randox Enzymatic UV method
	mg/dl	1.34	1.07	1.61	0.14	0.27	
	µmol/l	125	100	150	12.50	25.00	Jaffe rate blanked
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	120	96.2	144	11.90	23.80	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.36	1.09	1.63	0.14	0.27	
gamma-GT	U/l	54	46	62	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.06	5.15	6.97	0.46	0.91	Hexokinase
	mg/dl	109	92.8	125	8.10	16.20	
	mmol/l	6.24	5.30	7.18	0.47	0.94	Glucose oxidase
	mg/dl	112	95.5	129	8.25	16.50	
HDL - Cholesterol	mmol/l	1.21	1.02	1.40	0.10	0.19	Direct HDL Immunoseparation
	mg/dl	46.7	39.4	54.0	3.65	7.30	
	mmol/l	1.17	1.00	1.34	0.09	0.17	Direct Clearance Method
	mg/dl	45.2	38.5	51.9	3.35	6.70	
Iron	µmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	µg/dl	112	91.7	132	10.15	20.30	
Lactate	mmol/l	1.31	1.08	1.54	0.12	0.23	Colorimetric Lactate Oxidase
	mg/dl	11.8	9.73	13.9	1.04	2.07	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
LD (LDH)	U/l	224	190	258	17.00	34.00	L->P 37°C
	U/l	449	382	516	33.50	67.00	P->L German methods 37°C
	U/l	227	193	261	17.00	34.00	L->P IFCC 37°C
Lipase	U/l	42	33	51	4.50	9.00	Other Colorimetric 37°C
Lithium	mmol/l	0.99	0.87	1.10	0.06	0.12	Spectrophotometric
	mg/dl	0.685	0.603	0.767	0.04	0.08	
Magnesium	mmol/l	0.91	0.80	1.02	0.06	0.11	Xylidyl Blue
	mg/dl	2.22	1.95	2.49	0.14	0.27	
Phosphate Inorganic	mmol/l	1.39	1.18	1.60	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.31	3.66	4.96	0.33	0.65	
Potassium	mmol/l	3.95	3.63	4.27	0.16	0.32	ISE method - indirect
Protein Total	g/l	60.6	48.5	72.7	6.05	12.10	Biuret reaction end point
	g/dl	6.06	4.85	7.27	0.61	1.21	
Sodium	mmol/l	144	136	152	4.00	8.00	ISE method - indirect
TIBC	µmol/l	52.7	41.7	63.7	5.50	11.00	FE+UIBC(saturation with iron)
	µg/dl	295	233	357	31.00	62.00	
	µmol/l	54.3	42.9	65.7	5.70	11.40	Direct Colorimetric
	µg/dl	304	240	368	32.00	64.00	
Triglycerides	mmol/l	1.05	0.88	1.22	0.08	0.17	Lipase/GPO-PAP no correction
	mg/dl	92.9	78.1	108	7.40	14.80	
	mmol/l	1.00	0.84	1.16	0.08	0.16	L/G Kinase EP. no correction
	mg/dl	88.4	74.3	103	7.05	14.10	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.70	4.96	6.44	0.37	0.74	
	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.73	4.97	6.49	0.38	0.76	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Urea	mmol/l	7.37	6.26	8.48	0.56	1.11	Urease kinetic
	mg/dl	44.3	37.6	51.0	3.35	6.70	
	mmol/l	7.37	6.26	8.48	0.56	1.11	BUN
	mg/dl	20.7	17.6	23.8	1.55	3.10	

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Siemens/Dade Dimension EXL

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Purple
	g/dl	3.98	3.38	4.58	0.30	0.60	
Alkaline Phosphatase	U/l	196	167	225	14.50	29.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	43	34	52	4.50	9.00	Tris buffer with P5P 37°C
Amylase Total	U/l	90	77	103	6.50	13.00	Siemens 2-chloro-pNP linked substrate 37°C
	U/l	92	78	106	7.00	14.00	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	47	37	57	5.00	10.00	Tris buffer with P5P 37°C
	U/l	48	39	57	4.50	9.00	Siemens Dade Standard Non IFCC Correlated 37°C
Bicarbonate	mmol/l	15.4	12.2	18.6	1.60	3.20	Enzymatic
Bilirubin Direct	µmol/l	15.5	12.2	18.8	1.65	3.30	Diazo with Sulphanilic Acid
	mg/dl	0.907	0.714	1.10	0.10	0.19	
Bilirubin Total	µmol/l	30.6	24.2	37.0	3.20	6.40	Diazo with Sulphanilic Acid
	mg/dl	1.79	1.42	2.16	0.19	0.37	
Calcium	mmol/l	2.16	1.95	2.37	0.11	0.21	Cresolphthalein complexone
	mg/dl	8.66	7.82	9.50	0.42	0.84	
Cholesterol	mmol/l	3.64	3.17	4.11	0.24	0.47	Cholesterol Oxidase
	mg/dl	141	122	160	9.50	19.00	
	mmol/l	3.71	3.23	4.19	0.24	0.48	Dimension-Siemens reagents
	mg/dl	143	125	161	9.00	18.00	
Chloride	mmol/l	97.8	89.9	106	3.95	7.90	ISE indirect
CK Total	U/l	192	158	226	17.00	34.00	CK-NAC (IFCC) 37°C

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Siemens/Dade Dimension EXL

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	133	106	160	13.50	27.00	Alkaline picrate no deproteinization
	mg/dl	1.50	1.20	1.80	0.15	0.30	
	µmol/l	133	106	160	13.50	27.00	IDMS traceable
	mg/dl	1.50	1.20	1.80	0.15	0.30	
gamma-GT	U/l	58	49	67	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	68	58	78	5.00	10.00	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.18	5.26	7.10	0.46	0.92	Hexokinase
	mg/dl	111	94.8	127	8.10	16.20	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric without ppt.
	µg/dl	107	87.8	126	9.60	19.20	
Lactate	mmol/l	1.36	1.11	1.61	0.13	0.25	Colorimetric Lactate Oxidase
	mg/dl	12.3	10.0	14.6	1.15	2.30	
LD (LDH)	U/l	226	192	260	17.00	34.00	Siemens Dimension L-P Non IFCC 37°C
	U/l	227	193	261	17.00	34.00	L->P IFCC 37°C
Lipase	U/l	155	124	186	15.50	31.00	Colorimetric Siemens Dimension (LIPL Kit) 37°C
Magnesium	mmol/l	0.84	0.74	0.94	0.05	0.10	Methylthymol blue
	mg/dl	2.05	1.80	2.30	0.13	0.25	
Phosphate Inorganic	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.28	3.63	4.93	0.33	0.65	
	mmol/l	1.37	1.16	1.58	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.25	3.60	4.90	0.33	0.65	
Potassium	mmol/l	3.84	3.53	4.15	0.16	0.31	ISE method - indirect
Protein Total	g/l	61.7	49.3	74.1	6.20	12.40	Biuret reaction end point
	g/dl	6.17	4.93	7.41	0.62	1.24	
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - indirect

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RANDOX

Siemens/Dade Dimension EXL

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Triglycerides	mmol/l	0.95	0.80	1.11	0.08	0.15	L/G Kinase EP. no correction
	mg/dl	84.3	70.8	97.8	6.75	13.50	
	mmol/l	0.92	0.77	1.07	0.07	0.15	Lipase/Glycerol Dehydrogenase
	mg/dl	81.2	68.2	94.2	6.50	13.00	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.54	4.82	6.26	0.36	0.72	
	mmol/l	0.34	0.30	0.38	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.70	4.96	6.44	0.37	0.74	
Urea	mmol/l	7.15	6.08	8.22	0.54	1.07	Urease end point
	mg/dl	43.0	36.5	49.5	3.25	6.50	
	mmol/l	7.27	6.18	8.36	0.55	1.09	Urease kinetic
	mg/dl	43.7	37.1	50.3	3.30	6.60	
	mmol/l	7.27	6.18	8.36	0.55	1.09	BUN
	mg/dl	20.4	17.3	23.5	1.55	3.10	

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SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.2	34.2	46.2	3.00	6.00	Bromocresol Green
	g/dl	4.02	3.42	4.62	0.30	0.60	
	g/l	39.7	33.8	45.6	2.95	5.90	Bromocresol Purple
	g/dl	3.97	3.38	4.56	0.30	0.59	
Alkaline Phosphatase	U/l	145	123	167	11.00	22.00	Siemens Dimension AMP buffer 37°C
	U/l	164	139	189	12.50	25.00	AMP optimised to IFCC 37°C
	U/l	180	153	207	13.50	27.00	Randox AMP 37°C
ALT (GPT)	U/l	43	32	54	5.50	11.00	Tris buffer with P5P 37°C
	U/l	50	40	60	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Amylase Total	U/l	91	78	104	6.50	13.00	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	47	37	57	5.00	10.00	Tris buffer with P5P 37°C
	U/l	49	39	59	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Bicarbonate	mmol/l	14.5	11.5	17.5	1.50	3.00	Enzymatic
Bilirubin Direct	µmol/l	15.0	11.8	18.2	1.60	3.20	Diazo with Sulphanilic Acid
	mg/dl	0.878	0.690	1.07	0.09	0.19	
Bilirubin Total	µmol/l	30.4	24.0	36.8	3.20	6.40	Diazo with Sulphanilic Acid
	mg/dl	1.78	1.40	2.16	0.19	0.38	
Calcium	mmol/l	2.14	1.92	2.36	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.58	7.70	9.46	0.44	0.88	
Cholesterol	mmol/l	3.59	3.13	4.05	0.23	0.46	Dimension-Siemens reagents
	mg/dl	139	121	157	9.00	18.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Chloride	mmol/l	98.3	90.4	106	3.95	7.90	ISE indirect
CK Total	U/l	187	153	221	17.00	34.00	CK-NAC (IFCC) 37°C
	U/l	192	157	227	17.50	35.00	Dithioerythritol 37°C
	U/l	194	159	229	17.50	35.00	Dithioerythritol (DTE) IFCC correlated 37°C
Creatinine	µmol/l	133	106	160	13.50	27.00	Alkaline picrate no deproteinization
	mg/dl	1.50	1.20	1.80	0.15	0.30	
	µmol/l	120	96.0	144	12.00	24.00	Randox Enzymatic UV method
	mg/dl	1.36	1.08	1.64	0.14	0.28	
	µmol/l	128	103	153	12.50	25.00	Creatinine PAP method
	mg/dl	1.45	1.16	1.74	0.15	0.29	
	µmol/l	134	107	161	13.50	27.00	Jaffe rate blanked
	mg/dl	1.51	1.21	1.81	0.15	0.30	
	µmol/l	138	111	165	13.50	27.00	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.56	1.25	1.87	0.16	0.31	
	µmol/l	125	100	150	12.50	25.00	IDMS traceable
	mg/dl	1.41	1.13	1.69	0.14	0.28	
gamma-GT	U/l	59	51	67	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	67	57	77	5.00	10.00	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.25	5.31	7.19	0.47	0.94	Hexokinase
	mg/dl	113	95.7	130	8.65	17.30	
	mmol/l	6.27	5.33	7.21	0.47	0.94	Glucose oxidase
	mg/dl	113	96.0	130	8.50	17.00	
HDL - Cholesterol	mmol/l	1.29	1.10	1.48	0.10	0.19	Direct HDL PPD
	mg/dl	49.8	42.5	57.1	3.65	7.30	
	mmol/l	1.20	1.02	1.38	0.09	0.18	Direct HDL PEGME
	mg/dl	46.3	39.4	53.2	3.45	6.90	

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SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
HDL - Cholesterol	mmol/l	1.19	1.01	1.37	0.09	0.18	Direct Clearance Method
	mg/dl	45.9	39.0	52.8	3.45	6.90	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric with ppt.
	µg/dl	107	87.8	126	9.60	19.20	
	µmol/l	19.0	15.6	22.4	1.70	3.40	Colorimetric without ppt.
	µg/dl	106	87.2	125	9.40	18.80	
LD (LDH)	U/l	229	195	263	17.00	34.00	Siemens Dimension L-P Non IFCC 37°C
	U/l	229	194	264	17.50	35.00	L->P IFCC 37°C
Lipase	U/l	150	121	179	14.50	29.00	Colorimetric Siemens Dimension (LIPL Kit) 37°C
Lithium	mmol/l	0.96	0.85	1.08	0.06	0.12	Spectrophotometric
	mg/dl	0.667	0.587	0.747	0.04	0.08	
Magnesium	mmol/l	0.85	0.75	0.95	0.05	0.10	Methylthymol blue
	mg/dl	2.07	1.82	2.32	0.13	0.25	
Phosphate Inorganic	mmol/l	1.37	1.17	1.57	0.10	0.20	Phosphomolybdate enzymatic
	mg/dl	4.25	3.63	4.87	0.31	0.62	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.85	3.54	4.16	0.16	0.31	ISE method - indirect
Protein Total	g/l	61.8	49.4	74.2	6.20	12.40	Biuret reaction end point
	g/dl	6.18	4.94	7.42	0.62	1.24	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	48.8	38.5	59.1	5.15	10.30	Removal of excess free iron
	µg/dl	273	215	331	29.00	58.00	
	µmol/l	45.0	35.5	54.5	4.75	9.50	Direct Colorimetric
	µg/dl	252	198	306	27.00	54.00	

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SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Triglycerides	mmol/l	0.97	0.82	1.13	0.08	0.16	Lipase/GPO-PAP no correction
	mg/dl	85.9	72.2	99.6	6.85	13.70	
	mmol/l	0.93	0.78	1.08	0.07	0.15	L/G Kinase EP. no correction
	mg/dl	82.3	69.1	95.5	6.60	13.20	
	mmol/l	0.97	0.81	1.12	0.08	0.16	Lipase/Glycerol Dehydrogenase
	mg/dl	85.7	72.0	99.4	6.85	13.70	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase catalase 340nm
	mg/dl	5.63	4.91	6.35	0.36	0.72	
	mmol/l	0.33	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.61	4.87	6.35	0.37	0.74	
	mmol/l	0.33	0.29	0.38	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.61	4.89	6.33	0.36	0.72	
Urea	mmol/l	7.10	6.04	8.16	0.53	1.06	Urease end point
	mg/dl	42.7	36.3	49.1	3.20	6.40	
	mmol/l	7.10	6.04	8.16	0.53	1.06	Urease kinetic
	mg/dl	42.7	36.3	49.1	3.20	6.40	
	mmol/l	7.10	6.04	8.16	0.53	1.06	BUN
	mg/dl	19.9	16.9	22.9	1.50	3.00	

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Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.1	34.1	46.1	3.00	6.00	Bromocresol Purple
	g/dl	4.01	3.41	4.61	0.30	0.60	
Alkaline Phosphatase	U/l	166	141	191	12.50	25.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	42	33	51	4.50	9.00	Tris buffer with P5P 37°C
	U/l	42	33	51	4.50	9.00	Siemens Dade Standard Non IFCC Correlated 37°C
Amylase Total	U/l	90	76	104	7.00	14.00	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	47	38	56	4.50	9.00	Tris buffer with P5P 37°C
	U/l	47	37	57	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Bicarbonate	mmol/l	14.7	11.7	17.7	1.50	3.00	Enzymatic
Bilirubin Direct	µmol/l	15.1	11.9	18.3	1.60	3.20	Diazo with Sulphanilic Acid
	mg/dl	0.883	0.696	1.07	0.09	0.19	
Bilirubin Total	µmol/l	30.3	23.9	36.7	3.20	6.40	Diazo with Sulphanilic Acid
	mg/dl	1.77	1.40	2.14	0.19	0.37	
Calcium	mmol/l	2.15	1.94	2.36	0.11	0.21	Cresolphthalein complexone
	mg/dl	8.62	7.78	9.46	0.42	0.84	
Cholesterol	mmol/l	3.68	3.20	4.16	0.24	0.48	Dimension-Siemens reagents
	mg/dl	142	124	160	9.00	18.00	
Chloride	mmol/l	101	93.0	109	4.00	8.00	ISE indirect
CK Total	U/l	186	152	220	17.00	34.00	CK-NAC (IFCC) 37°C
	U/l	178	146	210	16.00	32.00	Dithioerythritol 37°C
	U/l	192	157	227	17.50	35.00	Dithioerythritol (DTE) IFCC correlated 37°C

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Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Creatinine	µmol/l	131	105	157	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.48	1.19	1.77	0.15	0.29	
	µmol/l	122	97.4	147	12.30	24.60	Randox Enzymatic UV method
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	µmol/l	124	98.8	149	12.60	25.20	IDMS traceable
	mg/dl	1.40	1.12	1.68	0.14	0.28	
gamma-GT	U/l	63	54	72	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	65	56	74	4.50	9.00	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.00	5.10	6.90	0.45	0.90	Hexokinase
	mg/dl	108	91.9	124	8.05	16.10	
HDL - Cholesterol	mmol/l	1.16	0.99	1.33	0.09	0.17	Direct HDL PEGME
	mg/dl	44.8	38.1	51.5	3.35	6.70	
Iron	µmol/l	19.4	15.9	22.9	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.9	127	9.55	19.10	
Lactate	mmol/l	1.48	1.21	1.75	0.14	0.27	UV LDH
	mg/dl	13.3	10.9	15.7	1.20	2.40	
LD (LDH)	U/l	242	205	279	18.50	37.00	Siemens Dimension L-P Non IFCC 37°C
	U/l	228	194	262	17.00	34.00	L->P IFCC 37°C
Lipase	U/l	157	126	188	15.50	31.00	Colorimetric Siemens Dimension (LIPL Kit) 37°C
Lithium	mmol/l	0.94	0.83	1.06	0.06	0.11	Spectrophotometric
	mg/dl	0.654	0.576	0.732	0.04	0.08	
Magnesium	mmol/l	0.80	0.70	0.89	0.05	0.10	Methylthymol blue
	mg/dl	1.94	1.70	2.18	0.12	0.24	
Phosphate Inorganic	mmol/l	1.33	1.13	1.53	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.12	3.50	4.74	0.31	0.62	

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RANDOX

Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Potassium	mmol/l	3.84	3.53	4.15	0.16	0.31	ISE method - indirect
Protein Total	g/l	61.5	49.2	73.8	6.15	12.30	Biuret reaction end point
	g/dl	6.15	4.92	7.38	0.62	1.23	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.4	111	7.60	15.20	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.36	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.39	4.69	6.09	0.35	0.70	
	mmol/l	0.32	0.28	0.36	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.33	4.64	6.02	0.35	0.69	
Urea	mmol/l	7.10	6.03	8.17	0.54	1.07	Urease kinetic
	mg/dl	42.7	36.2	49.2	3.25	6.50	
	mmol/l	7.10	6.04	8.16	0.53	1.06	BUN
	mg/dl	19.9	16.9	22.9	1.50	3.00	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	40.6	34.5	46.7	3.05	6.10	Bromocresol Green
	g/dl	4.06	3.45	4.67	0.31	0.61	
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
Bilirubin Total	µmol/l	31.0	24.5	37.5	3.25	6.50	Diazo with Sulphanilic Acid
	mg/dl	1.81	1.43	2.19	0.19	0.38	
Calcium	mmol/l	2.33	2.09	2.57	0.12	0.24	Arsenazo III
	mg/dl	9.34	8.38	10.3	0.48	0.96	
Cholesterol	mmol/l	4.51	3.93	5.09	0.29	0.58	Cholesterol Oxidase
	mg/dl	174	152	196	11.00	22.00	
Creatinine	µmol/l	116	92.7	139	11.65	23.30	Alkaline picrate no deproteinization
	mg/dl	1.31	1.05	1.57	0.13	0.26	
Glucose	mmol/l	6.80	5.78	7.82	0.51	1.02	Glucose oxidase
	mg/dl	123	104	142	9.50	19.00	
Protein Total	g/l	62.6	50.1	75.1	6.25	12.50	Biuret reaction end point
	g/dl	6.26	5.01	7.51	0.63	1.25	
Uric Acid (Urate)	mmol/l	0.36	0.32	0.41	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	6.10	5.29	6.91	0.41	0.81	
Urea	mmol/l	7.38	6.27	8.49	0.56	1.11	Urease kinetic
	mg/dl	44.4	37.7	51.1	3.35	6.70	
	mmol/l	7.38	6.27	8.49	0.56	1.11	BUN
	mg/dl	20.7	17.6	23.8	1.55	3.10	

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Weiner Lab BT 3000 Plus/CB 350i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot. No. 917UN Cat. No. HN1530 / HS2611

Size: 20 x 5 ml / 5 x 5 ml Expiry: 2018-04

			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Albumin	g/l	38.8	33.0	44.6	2.90	5.80	Bromocresol Green
	g/dl	3.88	3.30	4.46	0.29	0.58	
Calcium	mmol/l	2.27	2.04	2.50	0.12	0.23	Arsenazo III
	mg/dl	9.10	8.18	10.0	0.46	0.92	
Cholesterol	mmol/l	4.31	3.75	4.87	0.28	0.56	Cholesterol Oxidase
	mg/dl	166	145	187	10.50	21.00	
Creatinine	µmol/l	122	97.3	147	12.35	24.70	Alkaline picrate no deproteinization
	mg/dl	1.38	1.10	1.66	0.14	0.28	
gamma-GT	U/l	52	44	60	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	41	35	47	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	32	27	37	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.27	5.33	7.21	0.47	0.94	Glucose oxidase
	mg/dl	113	96.0	130	8.50	17.00	
Phosphate Inorganic	mmol/l	1.54	1.31	1.77	0.12	0.23	Phosphomolybdate UV
	mg/dl	4.77	4.06	5.48	0.36	0.71	
Protein Total	g/l	59.0	47.2	70.8	5.90	11.80	Biuret reaction end point
	g/dl	5.90	4.72	7.08	0.59	1.18	
Triglycerides	mmol/l	0.91	0.76	1.05	0.07	0.15	Lipase/GPO-PAP no correction
	mg/dl	80.3	67.4	93.2	6.45	12.90	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.83	5.07	6.59	0.38	0.76	

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			Range				
Analyte	**unit**	**target**	**low**	**high**	**1SD**	**2SD**	**methods**
Urea	mmol/l	7.02	5.97	8.07	0.53	1.05	Urease kinetic
	mg/dl	42.2	35.9	48.5	3.15	6.30	
	mmol/l	7.02	5.97	8.07	0.53	1.05	BUN
	mg/dl	19.7	16.7	22.7	1.50	3.00	

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