

CERTIFICATE

Survey of 31 January 2025

You have fulfilled the requirements of the External Quality Assessment with the following analysis

Clinical Chemistry - Conventional Analysis (100):

Validity 6 months:

AP (R: B1a)
Albumin (R: B1a)
Bilirubin (R: B1a)
CK (R: B1a)
Calcium (R: B1a)
Cholesterol (R: B1a)
Creatinine (R: B1a)
GGT (R: B1a)
GOT (ASAT) (R: B1a)
GPT (ALAT) (R: B1a)
Glucose (R: B1a)
IgA (R: B1a)
IgG (R: B1a)
IgM (R: B1a)

LDH (R: B1a)
Lactate (R: B1a)
Lithium (R: B1a)
Magnesium (R: B1a)
Phosphate (R: B1a)
Protein (R: B1a)
Triglycerides (R: B1a)
Urea (R: B1a)
Uric Acid (R: B1a)

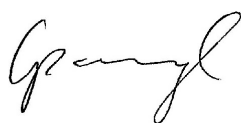
Validity 12 months:

Albumin (Electrophoresis)
Aldolase
Bilirubin conj.
CHE
Iron
Prostatic Acid Phosphatase
alpha-Amylase
gamma-Globulins (Electrophoresis)

(R) analysis is subject to the RiliBÄK

Customer:
10043733
CG Cytogenomics Medical Laboratory
CG Cytogenomics
313 Hrakleiou Av.
14122 Neo Irakleio

Düsseldorf, 10 February 2025



Prof. Dr. med. Michael Spannagl
(Head of Reference Institution)



Dr. rer. nat. Manfred Falck
(Adviser)

CERTIFICATE OF PARTICIPATION

Survey of 31 January 2025

You have participated in the External Quality Assessment with the following analysis

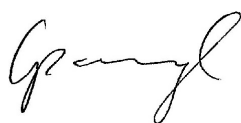
Clinical Chemistry - Conventional Analysis (100):

AP (R: B1a)	GPT (ALAT) (R: B1a)	Sodium (R: B1a)
Acid Phosphatase	Glucose (R: B1a)	Transferrine (R: B1a)
Albumin (Electrophoresis)	IgA (R: B1a)	Triglycerides (R: B1a)
Albumin (R: B1a)	IgG (R: B1a)	Urea (R: B1a)
Aldolase	IgM (R: B1a)	Uric Acid (R: B1a)
Bilirubin (R: B1a)	Iron	alpha-Amylase
Bilirubin conj.	LDH (R: B1a)	gamma-Globulins (Electrophoresis)
CHE	Lactate (R: B1a)	
CK (R: B1a)	Lipase	
Calcium (R: B1a)	Lithium (R: B1a)	
Chloride (R: B1a)	Magnesium (R: B1a)	
Cholesterol (R: B1a)	Phosphate (R: B1a)	
Creatinine (R: B1a)	Potassium (R: B1a)	
GGT (R: B1a)	Prostatic Acid Phosphatase	
GOT (ASAT) (R: B1a)	Protein (R: B1a)	

(R) analysis is subject to the RiliBÄK

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Dr. rer. nat. Manfred Falck
(Adviser)

Listing and evaluation of the results

10043733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

Survey of 31 January 2025

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100

Clinical Chemistry - Conventional Analysis

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
AP	11	U/l	99.0	107	SV	87.7	126	-7.5%	-1,62	+	
	12		147	160	SV	131	189	-8.1%	-1,76	+	
Acid Phosphatase	11	U/l	9.91	7.23	SV	4.84	9.62	37.1%	3,99	-	
	12		41.2	30.2	SV	20.2	40.2	36.3%	3,02	-	
Albumin	11	g/dl	4.02	4.22	SV	3.38	5.06	-4.7%	-0,976	+	
	12		4.40	4.59	SV	3.67	5.51	-4.1%	-0,731	+	
Albumin (Electrophoresis)	11	%	62.8	62.3	SV	53.6	71.0	0.9%	0,277	+	
	12		63.6	62.0	SV	53.3	70.7	2.6%	0,755	+	
Aldolase	11	U/l	2.29	2.20	SV	0.500	3.90	4.1%	0,113	+	
	12		4.11	4.46	SV	2.76	6.16	-7.8%	-0,259	+	
Bilirubin	11	mg/dl	1.40	1.25	SV	0.975	1.53	12.0%	2,24	+	
	12		5.22	4.67	SV	3.64	5.70	11.8%	2,24	+	
Bilirubin conj.	11	mg/dl	0.500	0.447	SV	0.286	0.608	11.9%	1,36	+	
	12		2.10	1.88	SV	1.20	2.56	11.7%	1,91	+	
CHE	11	U/l	10390	10194	SV	8359	12029	1.9%	0,248	+	
	12		11886	11851	SV	9718	13984	0.3%	0,046	+	
CK	11	U/l	121	126	RMV	101	151	-4.0%	-1,73	+	
	12		198	198	RMV	158	238	0.0%	0	+	
Calcium	11	mmol/l	2.34	2.34	RMV	2.11	2.57	-0.1%	-0,041	+	
	12		2.91	2.96	RMV	2.66	3.26	-1.7%	-0,678	+	
Chloride	11	mmol/l	3.70	94.3	RMV	86.8	102	-96.1%	-53,3	-	
	12		124	126	RMV	116	136	-1.9%	-0,83	+	
Cholesterol	11	mg/dl	209	237	RMV	206	268	-11.8%	-4,84	+	
	12		175	199	RMV	173	225	-12.1%	-4,83	+	
Creatinine	11	mg/dl	1.23	1.45	MW	1.16	1.74	-15.2%	-2,18	+	
	12		4.26	4.45	RMV	3.56	5.34	-4.3%	-1,2	+	
GGT	11	U/l	36.0	38.0	RMV	30.0	46.0	-5.3%	-1,09	+	
	12		88.0	87.5	RMV	69.1	106	0.6%	0,14	+	
GOT (ASAT)	11	U/l	44.0	44.2	RMV	34.9	53.5	-0.5%	-0,114	+	
	12		164	160	RMV	126	194	2.5%	0,68	+	
GPT (ALAT)	11	U/l	29.0	27.1	RMV	21.4	32.8	7.0%	1,73	+	
	12		121	117	RMV	92.4	142	3.4%	1,11	+	
Glucose	11	mg/dl	73.0	81.7	RMV	69.4	94.0	-10.6%	-3,88	+	
	12		240	258	RMV	219	297	-7.0%	-3,07	+	
IgA	11	mg/dl	194	193	SV	154	232	0.5%	0,107	+	
	12		211	220	SV	176	264	-4.1%	-0,94	+	
IgG	11	mg/dl	955	977	SV	801	1153	-2.3%	-0,736	+	
	12		1087	1135	SV	931	1339	-4.2%	-1,12	+	
IgM	11	mg/dl	78.0	85.6	SV	63.3	108	-8.9%	-1,6	+	
	12		96.0	105	SV	77.7	132	-8.6%	-1,61	+	
Iron	11	µmol/l	38.1	39.2	SV	33.7	44.7	-2.7%	-0,735	+	
	12		38.9	39.8	SV	34.2	45.4	-2.4%	-0,619	+	
LDH	11	U/l	170	171	RMV	140	202	-0.6%	-0,193	+	
	12		253	268	RMV	220	316	-5.6%	-1,63	+	
Lactate	11	mmol/l	4.10	4.01	SV	3.29	4.73	2.2%	1,02	+	
	12		4.00	4.02	SV	3.30	4.74	-0.5%	-0,183	+	
Lipase	11	U/l	46.0	62.6	SV	47.0	78.3	-26.5%	-4,61	-	
	12		61.0	72.2	SV	54.2	90.3	-15.5%	-4,48	+	

Listing and evaluation of the results

10043733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

Survey of 31 January 2025

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
Lithium	11	mmol/l	0.580	0.648	RMV	0.570	0.726	-10.5%	-1,74	+	
	12		1.79	1.80	RMV	1.58	2.02	-0.6%	-0,192	+	
Magnesium	11	mmol/l	0.834	0.865	RMV	0.735	0.995	-3.5%	-1,14	+	
	12		1.83	1.87	RMV	1.59	2.15	-2.2%	-0,855	+	
Phosphate	11	mmol/l	1.13	1.10	SV	0.924	1.28	2.4%	0,868	+	
	12		2.30	2.17	SV	1.82	2.52	5.8%	2,21	+	
Potassium	11	mmol/l	145	3.84	RMV	3.53	4.15	3678.6%	1197	-	
	12		6.50	6.92	MW	6.37	7.47	-6.1%	-1,79	+	
Prostatic Acid Phosphatase	(1) 11	U/l	7.91	7.80	SV	5.23	10.4	1.4%	0,046	+	
	(1) 12		40.0	34.0	SV	22.8	45.2	17.5%	0,536	+	
Protein	11	g/dl	6.25	6.88	RMV	6.19	7.57	-9.2%	-3,58	+	
	12		6.68	7.32	RMV	6.59	8.05	-8.7%	-3,22	+	
Sodium	11	mmol/l	91.9	148	RMV	141	155	-37.9%	-9,91	-	
	12		150	160	SV	152	168	-6.5%	-2,17	-	
Transferrine	11	mg/dl	226	256	SV	225	287	-11.7%	-3,26	+	
	12		253	290	SV	255	325	-12.8%	-3,08	-	
Triglycerides	11	mg/dl	159	159	RMV	134	184	0.0%	0	+	
	12		179	176	RMV	148	204	1.7%	0,533	+	
Urea	11	mg/dl	33.0	33.8	RMV	27.0	40.6	-2.4%	-0,597	+	
	12		137	144	RMV	115	173	-4.9%	-1,57	+	
Uric Acid	11	mg/dl	4.40	4.48	RMV	3.90	5.06	-1.8%	-0,672	+	
	12		7.30	7.40	RMV	6.44	8.36	-1.4%	-0,465	+	
alpha-Amylase	11	U/l	85.0	84.5	SV	59.2	110	0.6%	0,167	+	
	12		232	236	SV	165	307	-1.7%	-0,404	+	
gamma-Globulins (Electrophoresis)	11	%	13.1	12.9	SV	8.77	17.0	1.6%	0,198	+	
	12		12.9	12.9	SV	8.77	17.0	-0.4%	-0,134	+	

Listing and evaluation of the results

10043733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

Survey of 31 January 2025

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Testkit
AP	11	U/l	99.0	1.00	11	SI	SI02	
	12		147	1.00				
Acid Phosphatase	11	U/l	9.91	1.00	50	TS	KN98	
	12		41.2	1.00				
Albumin	11	g/dl	4.02	1.00	29	SI	SI02	
	12		4.40	1.00				
Albumin (Electrophoresis)	11	%	62.8	1.00	133	HD	ZY99	
	12		63.6	1.00				
Aldolase	11	U/l	2.29	1.00	9999	SI	SI02	
	12		4.11	1.00				
Bilirubin	11	mg/dl	1.40	1.00	127	SI	SI02	
	12		5.22	1.00				
Bilirubin conj.	11	mg/dl	0.500	1.00	127	SI	SI02	
	12		2.10	1.00				
CHE	11	U/l	10390	1.00	104	SI	SI02	
	12		11886	1.00				
CK	11	U/l	121	1.00	60	SI	SI02	
	12		198	1.00				
Calcium	11	mg/dl	9.37	0.250	12	SI	SI02	
	12		11.7	0.250				
Chloride	11	mmol/l	3.70	1.00	70	TS	KN98	
	12		124	1.00				
Cholesterol	11	mg/dl	209	1.00	33	SI	SI02	
	12		175	1.00				
Creatinine	11	mg/dl	1.23	1.00	74	SI	SI02	
	12		4.26	1.00				
GGT	11	U/l	36.0	1.00	60	SI	SI02	
	12		88.0	1.00				
GOT (ASAT)	11	U/l	44.0	1.00	2	SI	SI02	
	12		164	1.00				
GPT (ALAT)	11	U/l	29.0	1.00	2	SI	SI02	
	12		121	1.00				
Glucose	11	mg/dl	73.0	1.00	58	SI	SI02	
	12		240	1.00				
IgA	11	mg/dl	194	1.00	156	SI	SI02	
	12		211	1.00				
IgG	11	mg/dl	955	1.00	156	SI	SI02	
	12		1087	1.00				
IgM	11	mg/dl	78.0	1.00	156	SI	SI02	
	12		96.0	1.00				
Iron	11	µg/dl	213	0.179	51	SI	SI02	
	12		217	0.179				
LDH	11	U/l	170	1.00	9999	SI	SI02	
	12		253	1.00				
Lactate	11	mmol/l	4.10	1.00	43	SI	SI02	
	12		4.00	1.00				
Lipase	11	U/l	46.0	1.00	45	SI	SI02	
	12		61.0	1.00				
Lithium	11	mmol/l	0.580	1.00	70	TS	KN98	
	12		1.79	1.00				
Magnesium	11	mg/dl	2.03	0.411	128	SI	SI02	
	12		4.45	0.411				
Phosphate	11	mg/dl	3.49	0.323	7	SI	SI02	
	12		7.11	0.323				
Potassium	11	mmol/l	145	1.00	70	TS	KN98	
	12		6.50	1.00				

Listing and evaluation of the results

10043733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

Survey of 31 January 2025

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Testkit
Prostatic Acid Posphatase	11	U/l	7.91	1.00	50	TS	KN98	
	12		40.0	1.00				
Protein	11	g/dl	6.25	1.00	27	SI	SI02	
	12		6.68	1.00				
Sodium	11	mmol/l	91.9	1.00	70	TS	KN98	
	12		150	1.00				
Transferrine	11	mg/dl	226	1.00	156	SI	SI02	
	12		253	1.00				
Triglycerides	11	mg/dl	159	1.00	57	SI	SI02	
	12		179	1.00				
Urea	11	mg/dl	33.0	1.00	117	SI	SI02	
	12		137	1.00				
Uric Acid	11	mg/dl	4.40	1.00	124	SI	SI02	
	12		7.30	1.00				
alpha-Amylase	11	U/l	85.0	1.00	48	SI	SI02	
	12		232	1.00				
gamma-Globulins (Electrophoresis)	11	%	13.1	1.00	133	HD	ZY99	
	12		12.9	1.00				

(1) In individual cases is a statistically valid valuation with consensus value not given, because size of the collective < 8 values.

Individual summary of results

10043733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

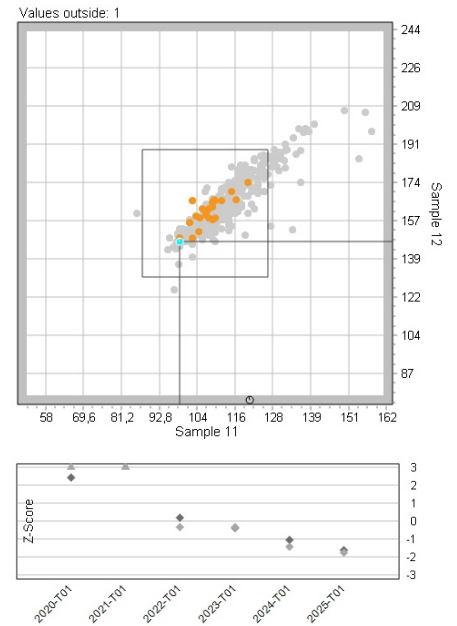
Survey of 31 January 2025

100

Clinical Chemistry - Conventional Analysis

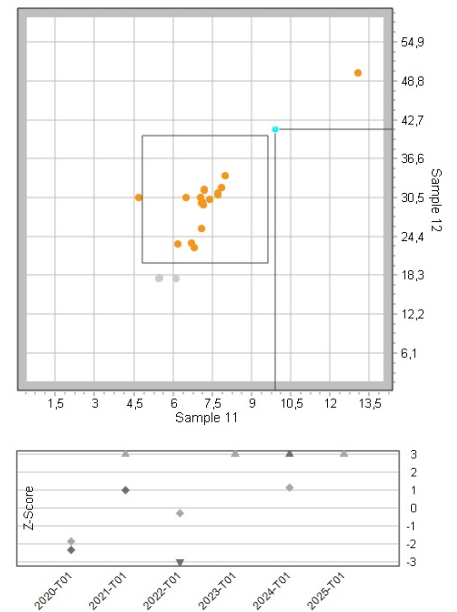
AP (U/l, N = 495)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	120	98.4 - 142	120	3.13	61	100	100	
	12	178	146 - 210	178	2.03	61	100	100	
BE (OL) AU-System / other	11	131	107 - 155	131	4.88	40	97.5	97.5	
	12	187	153 - 221	187	4.36	40	100	100	
Siemens (BG, SI)	11	107	87.7 - 126	107	4.61	26	100	100	
	12	160	131 - 189	160	4.61	26	100	100	
Siemens (Dade Behring)	11	114	93.5 - 135	114	4.85	31	100	96.8	
	12	166	136 - 196	166	3.36	31	96.8	96.8	
Roche	11	108	88.6 - 127	108	5.51	322	99.7	99.7	
	12	158	130 - 186	158	4.45	322	100	100	
other providers / methods	11	118	96.8 - 139	118	10.5	15	93.3	86.7	
	12	160	131 - 189	160	12.3	15	86.7	86.7	

Rate of success: 99%



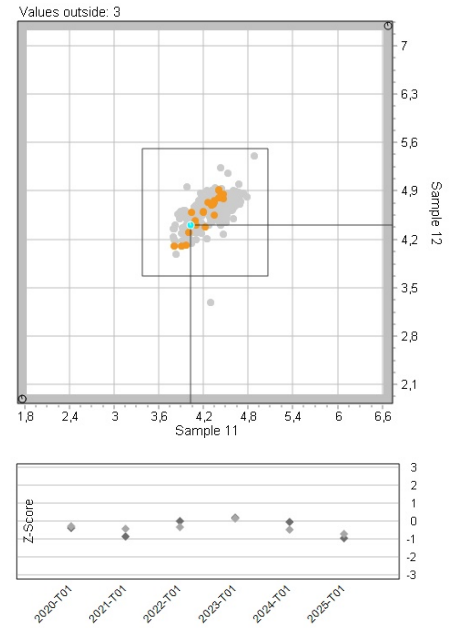
Acid Phosphatase (U/l, N = 23)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Beckman (1) - AU-Systems	11	5.69	3.81 - 7.57	5.69	7.31	3			
	12	17.8	11.9 - 23.7	17.8	0.635	3			
all providers	11	7.23	4.84 - 9.62	7.23	9.28	20	85.0	85.0	
	12	30.2	20.2 - 40.2	30.2	12.0	20	90.0	90.0	

Rate of success: 87%



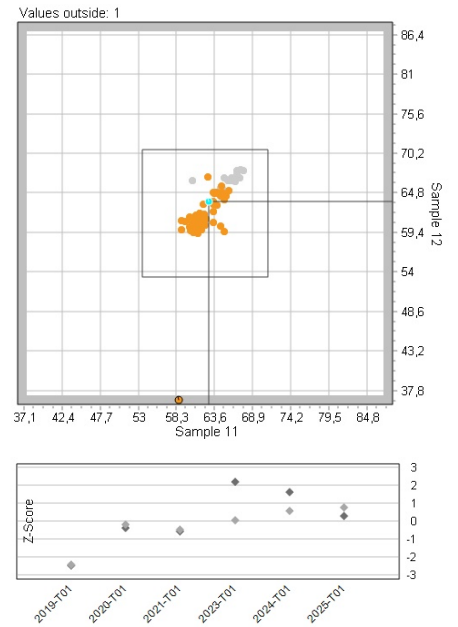
Albumin (g/dl, N = 399)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Abbott	11	4.22	3.38 - 5.06	4.22	3.22	43	100	100		
	12	4.58	3.66 - 5.50	4.58	4.50	43	100	100		
Beckman (Olympus)	11	4.13	3.30 - 4.96	4.13	2.71	34	100	100		
	12	4.55	3.64 - 5.46	4.55	2.18	34	100	100		
Siemens (BG, SI)	11	4.22	3.38 - 5.06	4.22	4.86	26	100	100		
	12	4.59	3.67 - 5.51	4.59	5.66	26	100	100		
Siemens (Dade Behring)	11	4.05	3.24 - 4.86	4.05	3.28	25	100	100		
	12	4.32	3.46 - 5.18	4.32	4.51	25	100	100		
Roche (immunological method)	11	4.16	3.33 - 4.99	4.16	4.45	48	100	100		
	12	4.68	3.74 - 5.62	4.68	3.93	48	100	100		
Roche (BCG method)	11	4.47	3.58 - 5.36	4.47	2.48	211	99.1	99.1		
	12	4.65	3.72 - 5.58	4.65	2.45	211	99.1	99.1		
other providers	11	4.26	3.41 - 5.11	4.26	5.52	12	91.7	83.3		
	12	4.56	3.65 - 5.47	4.56	7.04	12	83.3	83.3		

Rate of success: 99%



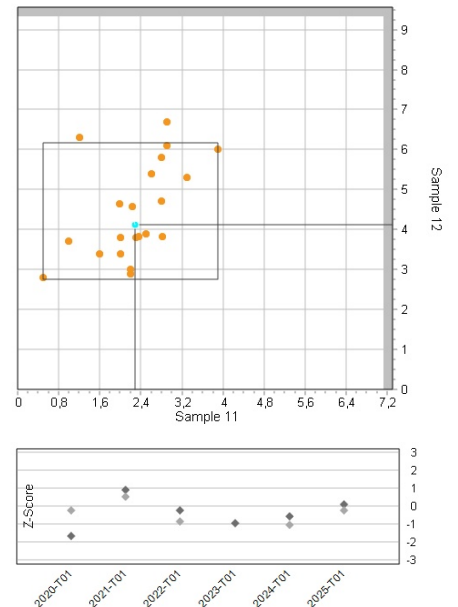
Albumin (Electrophoresis) (% , N = 81)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Capillary Zone Electrophoresis	11	62.3	53.6 - 71.0	62.3	3.13	64	100	98.4		
	12	62.0	53.3 - 70.7	62.0	3.42	64	98.4	98.4		
other methods	11	65.7	56.5 - 74.9	65.7	2.25	17	100	100		
	12	66.5	57.2 - 75.8	66.5	1.61	17	100	100		

Rate of success: 98,8%



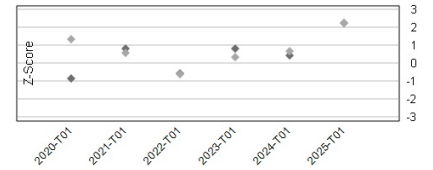
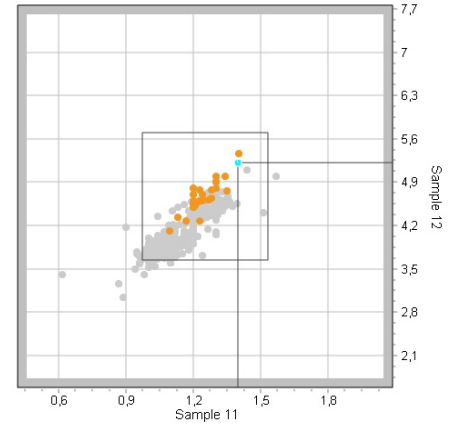
Aldolase (U/l, N = 24)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
all providers	11	2.20	0.500 - 3.90	2.20	36.0	24	100	91.7		
	12	4.46	2.76 - 6.16	4.46	30.3	24	91.7	91.7		

Rate of success: 91,7%



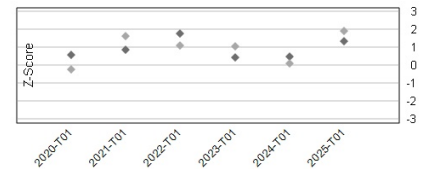
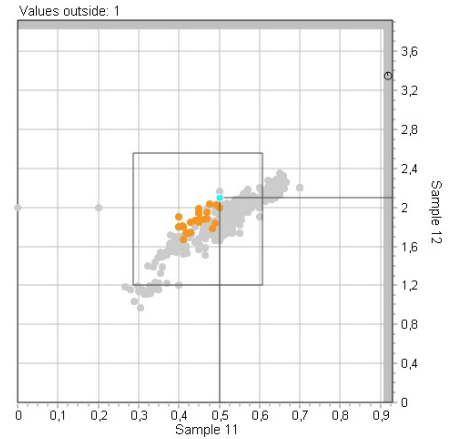
Bilirubin (mg/dl, N = 501)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	1.16	0.905 - 1.42	1.16	5.17	59	94.9	94.9	
	12	3.96	3.09 - 4.83	3.96	5.56	59	96.6		
Beckman (Olympus) AU-System	11	1.31	1.02 - 1.60	1.31	2.60	38	100	100	
	12	4.49	3.50 - 5.48	4.49	2.56	38	100		
Siemens (Dade Behring)	11	1.22	0.952 - 1.49	1.22	2.79	30	100	100	
	12	4.48	3.49 - 5.47	4.48	2.17	30	100		
Siemens (BG, SI)	11	1.25	0.975 - 1.53	1.25	5.36	29	100	100	
	12	4.67	3.64 - 5.70	4.67	5.27	29	100		
Roche	11	1.05	0.819 - 1.28	1.05	4.10	322	100	100	
	12	3.85	3.00 - 4.70	3.85	3.43	322	100		
other providers	11	1.18	0.920 - 1.44	1.18	10.5	23	91.3	91.3	
	12	4.31	3.36 - 5.26	4.31	7.96	23	100		

Rate of success: 99%



Bilirubin conj. (mg/dl, N = 441)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	0.485	0.310 - 0.660	0.485	4.74	54	100	100	
	12	1.81	1.16 - 2.46	1.81	4.92	54	100		
Beckman (Olympus) AU-System	11	0.381	0.244 - 0.518	0.381	7.09	32	100	100	
	12	1.58	1.01 - 2.15	1.58	6.90	32	100		
Siemens Atellica CH / Advia	11	0.447	0.286 - 0.608	0.447	8.72	27	100	100	
	12	1.88	1.20 - 2.56	1.88	6.12	27	100		
Siemens (Dade Behring)	11	0.328	0.210 - 0.446	0.328	6.71	24	100	100	
	12	1.17	0.749 - 1.59	1.17	3.50	24	100		
Roche (c303)	11	0.593	0.380 - 0.806	0.593	12.0	95	100	100	
	12	2.03	1.30 - 2.76	2.03	11.4	95	100		
Roche	11	0.541	0.346 - 0.736	0.541	6.10	193	99.0	99.0	
	12	1.99	1.27 - 2.71	1.99	3.92	193	100		
other providers	11	0.436	0.279 - 0.593	0.436	22.2	16	93.8	87.5	
	12	1.67	1.07 - 2.27	1.67	17.0	16	87.5		

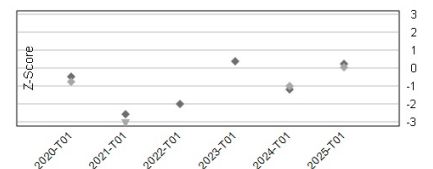
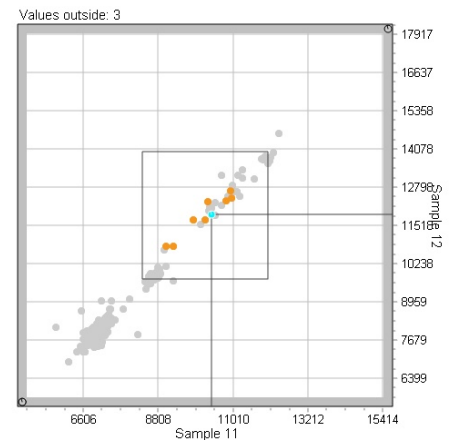
Rate of success: 99,1%



CHE (U/l, N = 371)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	8711	7143 - 10279	8711	1.49	43	100	100	
	12	9803	8038 - 11568	9803	1.60	43	100		
Siemens (Dade Behring)	11	11946	9796 - 14096	11946	2.27	14	100	100	
	12	13690	11226 - 16154	13690	1.93	14	100		
Siemens TK:CHE_2	11	10759	8822 - 12696	10759	4.04	15	100	100	
	12	12416	10181 - 14651	12416	3.99	15	100		
Siemens CHE (1)	11	8220	6740 - 9700	8220	15.2	2			
	12	9843	8071 - 11615	9843	13.7	2			
Siemens without TK	11	10194	8359 - 12029	10194	7.74	9	100	100	
	12	11851	9718 - 13984	11851	6.46	9	100		
Beckman (Olympus)	11	7003	5742 - 8264	7003	5.84	27	100	100	
	12	7918	6493 - 9343	7918	6.19	27	100		
Roche	11	7053	5783 - 8323	7053	2.10	261	98.5	98.5	
	12	7961	6528 - 9394	7961	2.12	261	98.5		

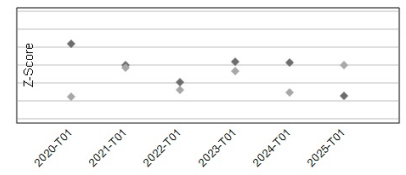
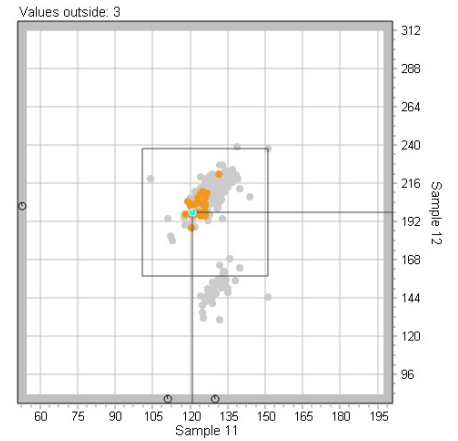
Rate of success: 98,9%

(1) In individual cases is a statistically valid valuation with consensus value not given, because size of the collective < 8 values.



CK (U/l, N = 480)										
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Abbott (RMV)	11	126	101 - 151	130	3.12	58	100	100		
	12	198	158 - 238	210	2.99	58	100	100		
Beckmann (Olympus)	11	126	101 - 151	131	3.15	40	100	100		
	12	150	120 - 180	150	5.25	40	100	100		
Siemens (Dimension)	11	126	101 - 151	124	2.17	32	100	100		
	12	198	158 - 238	208	2.73	32	100	100		
Siemens (BG, SI)	11	126	101 - 151	123	2.35	27	100	100		
	12	198	158 - 238	202	2.85	27	100	100		
Roche - Integra	11	126	101 - 151	127	2.61	28	100	100		
	12	198	158 - 238	210	2.63	28	100	100		
Roche - other devices	11	126	101 - 151	129	1.95	284	99.6	98.9		
	12	198	158 - 238	212	2.44	284	99.3			
dry chemistry	11	126	101 - 151	111	0.000	1	100	0.000		
	12	198	158 - 238	26.0	0.000	1	0.000			
other provider	11	126	101 - 151	129	10.2	10	100	100		
	12	198	158 - 238	209	9.38	10	100	100		

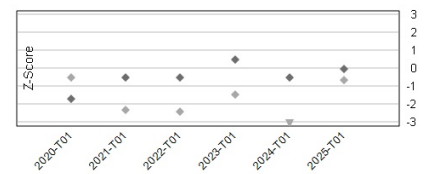
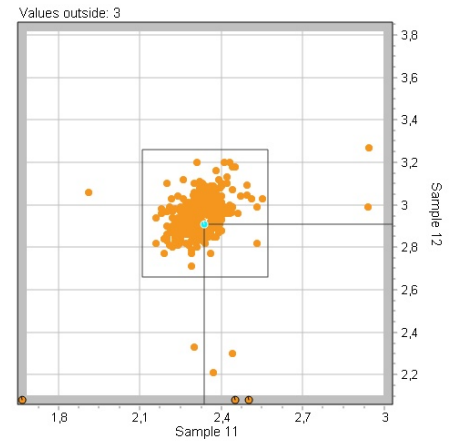
Rate of success: 99,2%



Calcium (mmol/l, N = 504)										
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
ionized Calcium (1)	11		Sample not evaluated			2				
	12		Sample not evaluated			2				
RMV	11	2.34	2.11 - 2.57	2.32	2.28	502	99.2	98.2		
	12	2.96	2.66 - 3.26	2.96	2.53	502	98.6			

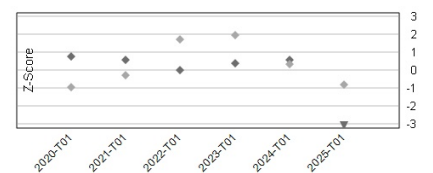
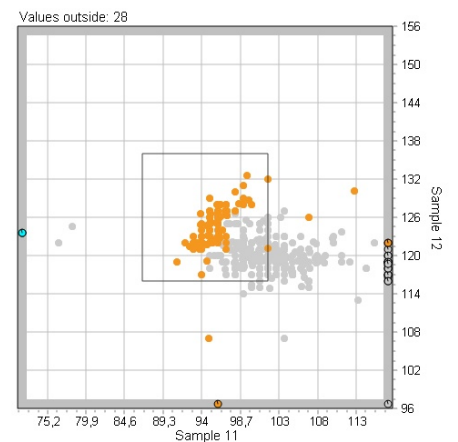
(1) In individual cases is a statistically valid valuation with consensus value not given, because size of the collective < 8 values.

Rate of success: 98,2%



Chloride (mmol/l, N = 419)										
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (Dade Behring) Dimension+	11	124	114 - 134	124	3.40	26	96.2	96.2		
	12	118	109 - 127	118	1.36	26	100			
Roche - without Integra	11	102	93.8 - 110	102	3.45	254	97.2	94.1		
	12	126	116 - 136	120	1.69	254	96.9			
Roche - Integra System	11	101	92.9 - 109	101	2.68	12	100	100		
	12	126	116 - 136	122	1.45	12	100			
Siemens Atellica CH	11	98.6	90.7 - 106	98.6	2.68	19	89.5	89.5		
	12	126	116 - 136	125	1.12	19	100			
other providers	11	94.3	86.8 - 102	95.6	1.78	108	96.3	94.4		
	12	126	116 - 136	125	2.31	108	98.1			

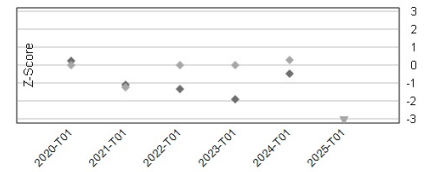
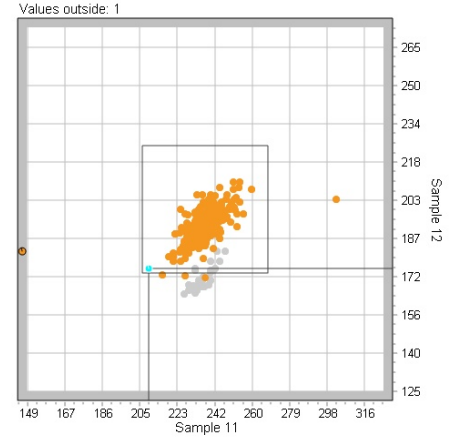
Rate of success: 94,3%



Cholesterol (mg/dl, N = 453)

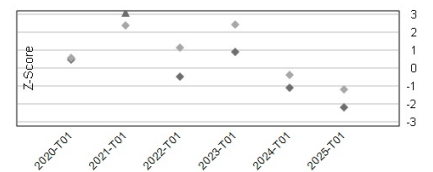
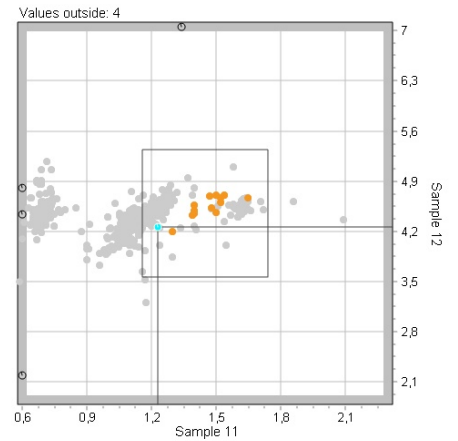
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
Siemens Dimension / Vista	11	237	206 - 268	236	2.13	30	100	100
	12	171	149 - 193	171	2.90	30	100	
other providers	11	237	206 - 268	237	2.44	423	99.5	98.8
	12	199	173 - 225	192	2.59	423	99.3	

Rate of success: 98,9%


Creatinine (mg/dl, N = 538)

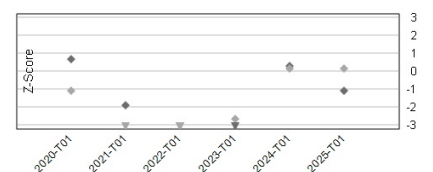
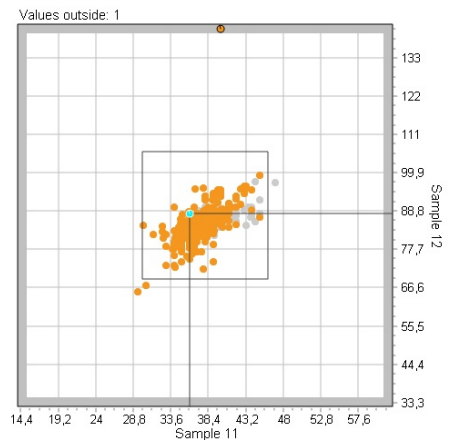
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
Abbott Architect- Jaffé	11	1.25	1.00 - 1.50	1.25	2.72	27	100	100
	12	4.45	3.56 - 5.34	4.53	2.32	27	100	
Abbott Alinity- Jaffé	11	1.27	1.02 - 1.52	1.27	4.09	22	100	100
	12	4.45	3.56 - 5.34	4.63	3.28	22	100	
Siemens (Dade Behring) -Jaffé	11	1.61	1.29 - 1.93	1.61	2.55	29	100	100
	12	4.45	3.56 - 5.34	4.54	1.85	29	100	
Olympus AU system - enzymatic	11	0.727	0.582 - 0.872	0.681	3.82	13	100	100
	12	4.45	3.56 - 5.34	4.90	3.04	13	100	
Siemens Atellica / Advia, Jaffé	11	1.45	1.16 - 1.74	1.45	6.97	14	100	100
	12	4.45	3.56 - 5.34	4.54	3.48	14	100	
other devices Jaffé-methods	11	1.12	0.896 - 1.34	1.12	5.71	272	96.3	95.2
	12	4.45	3.56 - 5.34	4.31	3.57	272	98.9	
other methods	11	0.727	0.582 - 0.872	0.702	4.56	161	91.3	90.7
	12	4.45	3.56 - 5.34	4.44	2.93	161	98.8	

Rate of success: 94,8%


GGT (U/l, N = 503)

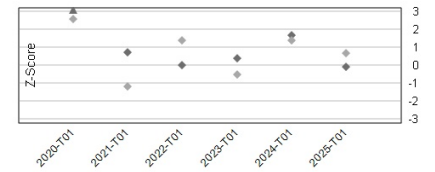
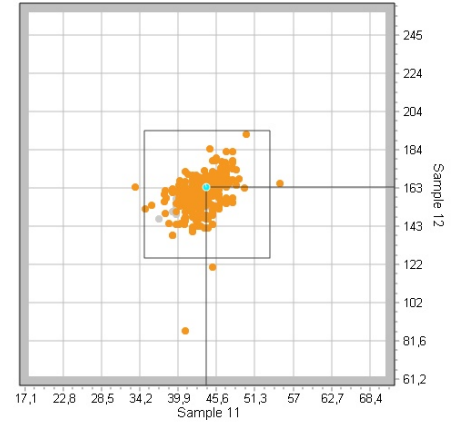
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
Olympus	11	38.0	30.0 - 46.0	37.8	3.20	29	100	100
	12	87.5	69.1 - 106	87.6	2.59	29	100	
Siemens (Bayer Health)	11	38.0	30.0 - 46.0	39.9	5.36	5	100	100
	12	87.5	69.1 - 106	89.6	2.11	5	100	
Siemens (Dimension)	11	38.0	30.0 - 46.0	41.8	6.12	33	97.0	97.0
	12	87.5	69.1 - 106	87.0	3.41	33	100	
other providers	11	38.0	30.0 - 46.0	37.5	4.91	436	99.8	99.3
	12	87.5	69.1 - 106	85.0	4.21	436	99.3	

Rate of success: 99,2%



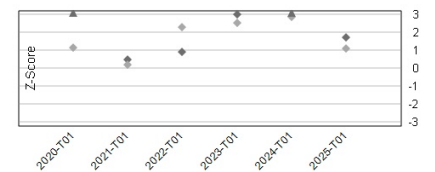
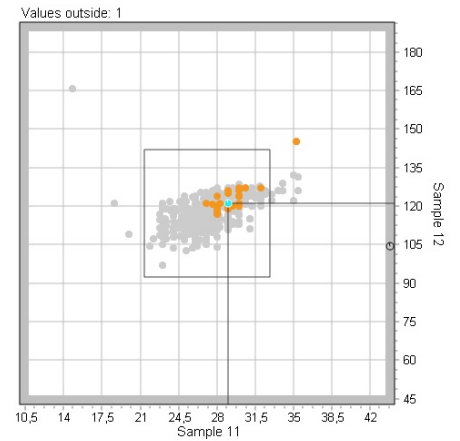
GOT (ASAT) (U/l, N = 503)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Roche	11	44.2	34.9 - 53.5	40.5	2.35	29	100	100		
Integra-System	12	160	126 - 194	159	2.90	29	100			
other providers	11	44.2	34.9 - 53.5	43.7	4.03	474	99.6	99.2		
	12	160	126 - 194	161	3.65	474	99.6			

Rate of success: 99,2%



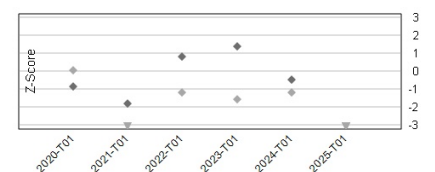
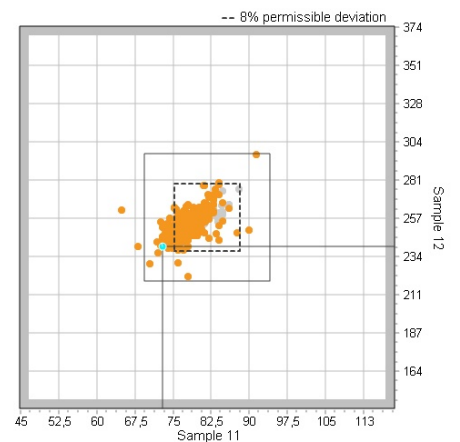
GPT (ALAT) (U/l, N = 508)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (Dimension)	11	31.6	25.0 - 38.2	31.6	6.08	32	100	100		
	12	117	92.4 - 142	124	2.77	32	100			
Siemens (BG, SI)	11	27.1	21.4 - 32.8	29.1	3.78	27	96.3	96.3		
	12	117	92.4 - 142	122	2.94	27	96.3			
other providers	11	27.1	21.4 - 32.8	27.0	7.15	449	98.7	98.7		
	12	117	92.4 - 142	116	4.44	449	99.8			

Rate of success: 98,6%



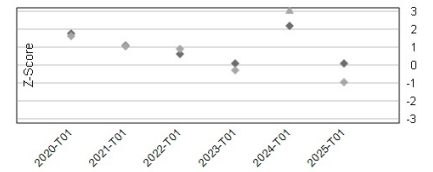
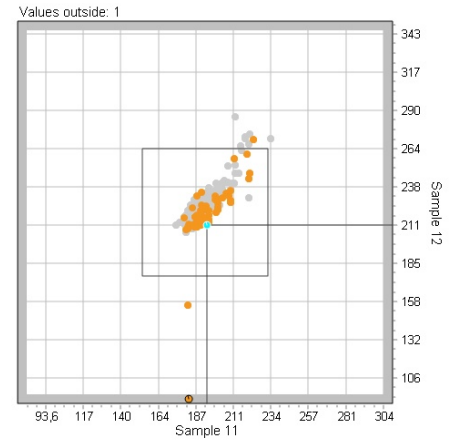
Glucose (mg/dl, N = 524)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (Dade-Behring) Dimension+	11	81.7	69.4 - 94.0	83.0	2.43	31	100	100		
	12	258	219 - 297	260	1.94	31	100			
other providers (RMV)	11	81.7	69.4 - 94.0	77.9	2.88	493	99.6	99.6		
	12	258	219 - 297	253	2.32	493	100			

Rate of success: 99,6%



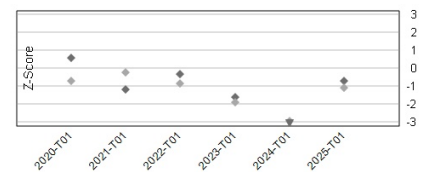
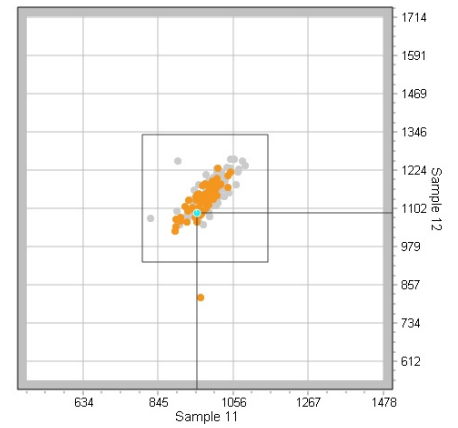
IgA (mg/dl, N = 212)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (Dade Behring)	11	213	170 - 256	213	4.25	15	100	100		
	12	253	202 - 304	253	8.81	15	100	100		
Roche	11	191	153 - 229	191	3.97	132	100	99.2		
	12	225	180 - 270	225	3.52	132	99.2	99.2		
other providers	11	193	154 - 232	193	4.84	65	100	95.4		
	12	220	176 - 264	220	4.35	65	95.4	95.4		

Rate of success: 98,1%



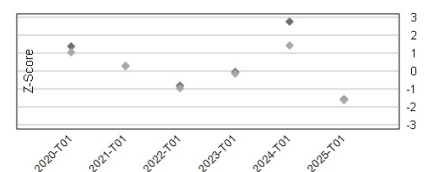
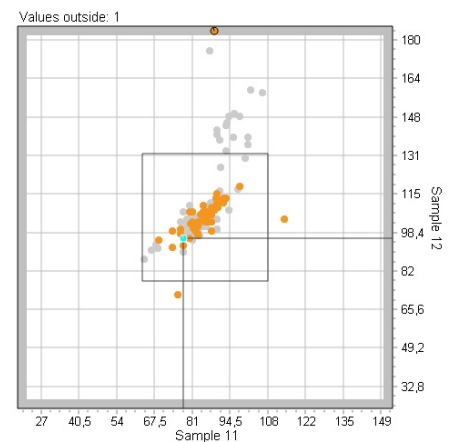
IgG (mg/dl, N = 223)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (Dade Behring)	11	1004	823 - 1185	1004	5.96	16	100	100		
	12	1200	984 - 1416	1200	4.43	16	100	100		
Roche	11	995	816 - 1174	995	2.68	133	100	100		
	12	1153	945 - 1361	1153	2.92	133	100	100		
other providers	11	977	801 - 1153	977	3.06	74	100	98.6		
	12	1135	931 - 1339	1135	3.77	74	98.6	98.6		

Rate of success: 99,6%



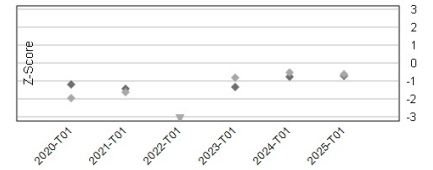
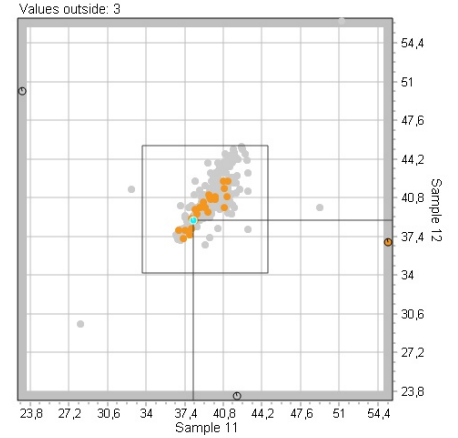
IgM (mg/dl, N = 208)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens (BG, SI) -Nephelometrie	11	96.1	71.1 - 121	96.1	5.40	16	100	100		
	12	141	104 - 178	141	7.94	16	100	100		
Roche	11	82.5	61.1 - 104	82.5	4.06	128	100	98.4		
	12	102	75.5 - 129	102	3.24	128	98.4	98.4		
other providers	11	85.6	63.3 - 108	85.6	5.55	64	98.4	95.3		
	12	105	77.7 - 132	105	5.31	64	96.9	96.9		

Rate of success: 97,6%



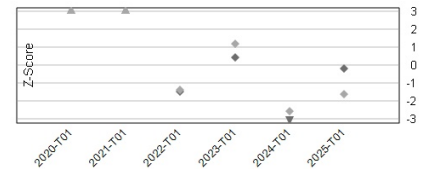
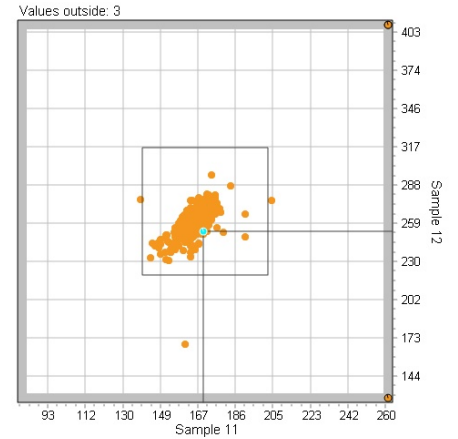
Iron ($\mu\text{mol/l}$, N = 425)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	41.1	35.3 - 46.9	41.1	2.26	57	100	100	
	12	43.6	37.5 - 49.7	43.6	2.45	57	100	100	
Beckman (Olympus)	11	40.8	35.1 - 46.5	40.8	2.16	34	94.1	94.1	
	12	40.7	35.0 - 46.4	40.7	1.87	34	97.1	97.1	
Siemens (BG, SI)	11	39.2	33.7 - 44.7	39.2	3.65	28	96.4	96.4	
	12	39.8	34.2 - 45.4	39.8	3.79	28	100	100	
Siemens (Dade Behring)	11	37.7	32.4 - 43.0	37.7	1.57	27	100	100	
	12	38.1	32.8 - 43.4	38.1	1.66	27	100	100	
other providers	11	39.8	34.2 - 45.4	39.8	2.18	279	98.9	98.6	
	12	40.6	34.9 - 46.3	40.6	2.21	279	98.9	98.9	

Rate of success: 98,4%



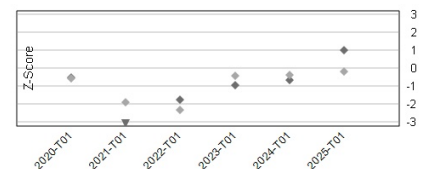
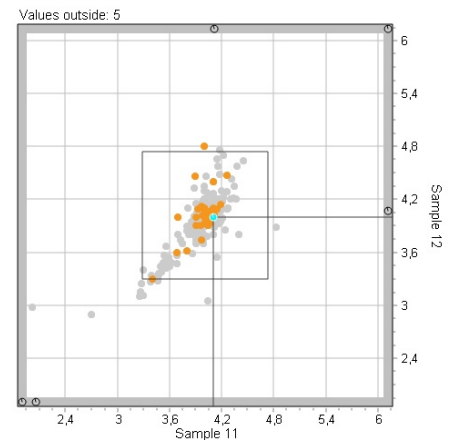
LDH (U/l, N = 478)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers (RMV)	11	171	140 - 202	167	3.10	478	99.0	98.7	
	12	268	220 - 316	263	3.49	478	99.4	99.4	

Rate of success: 98,7%



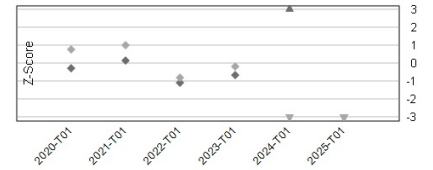
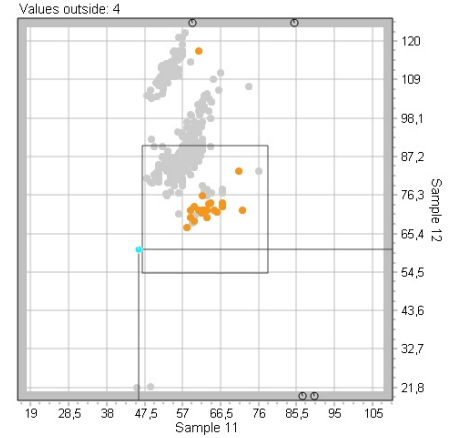
Lactate (mmol/l, N = 350)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott / Diasys	11	3.74	3.07 - 4.41	3.74	11.0	42	97.6	97.6	
	12	3.60	2.95 - 4.25	3.60	10.2	42	97.6	97.6	
M.42	11	4.03	3.30 - 4.76	4.03	6.00	15	100	100	
	12	4.07	3.34 - 4.80	4.07	10.7	15	100	100	
Siemens	11	4.01	3.29 - 4.73	4.01	2.19	40	100	97.5	
	12	4.02	3.30 - 4.74	4.02	2.71	40	97.5	97.5	
other methods	11	4.00	3.28 - 4.72	4.00	2.40	253	97.6	96.8	
	12	4.03	3.30 - 4.76	4.03	3.15	253	97.6	97.6	

Rate of success: 97,1%



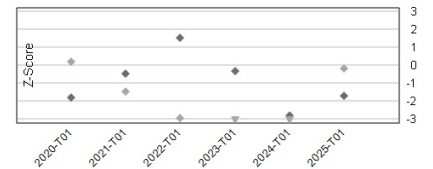
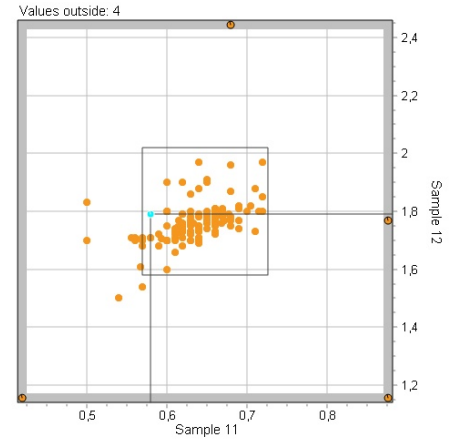
Lipase (U/l, N = 470)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott Alinity	11	52.0	39.0 - 65.0	52.0	5.08	29	96.6	96.6	
	12	83.2	62.4 - 104	83.2	3.56	29	96.6		
Abbott Architect	11	55.4	41.6 - 69.3	55.4	2.91	28	100	100	
	12	114	85.5 - 143	114	3.56	28	100		
Siemens Atellica CH	11	62.6	47.0 - 78.3	62.6	5.75	22	95.5	90.9	
	12	72.2	54.2 - 90.3	72.2	3.46	22	95.5		
Siemens (other)	11	61.7	46.3 - 77.1	61.7	4.59	34	100	100	
	12	99.2	74.4 - 124	99.2	5.41	34	100		
Beckman (Olympus)	11	53.1	39.8 - 66.4	53.1	4.78	35	100	100	
	12	111	83.3 - 139	111	3.59	35	100		
other providers	11	57.3	43.0 - 71.6	57.3	4.07	322	98.8	97.8	
	12	86.8	65.1 - 109	86.8	3.92	322	99.1		

Rate of success: 97,9%



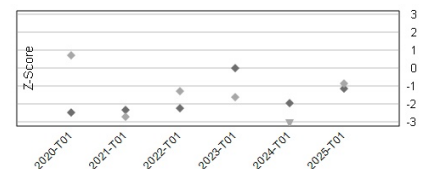
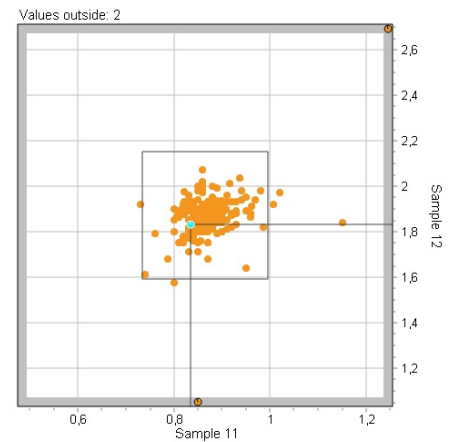
Lithium (mmol/l, N = 143)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers (RMV)	11	0.648	0.570 - 0.726	0.639	6.10	143	93.0	91.6	
	12	1.80	1.58 - 2.02	1.76	2.95	143	96.5		

Rate of success: 91,6%



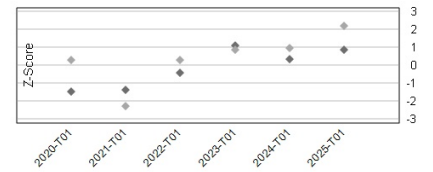
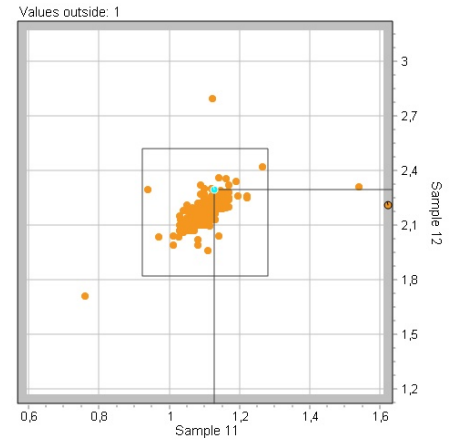
Magnesium (mmol/l, N = 391)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers (RMV)	11	0.865	0.735 - 0.995	0.868	3.11	391	98.7	98.2	
	12	1.87	1.59 - 2.15	1.87	2.57	391	99.2		

Rate of success: 98,2%



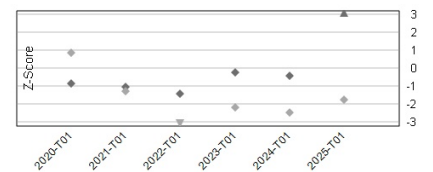
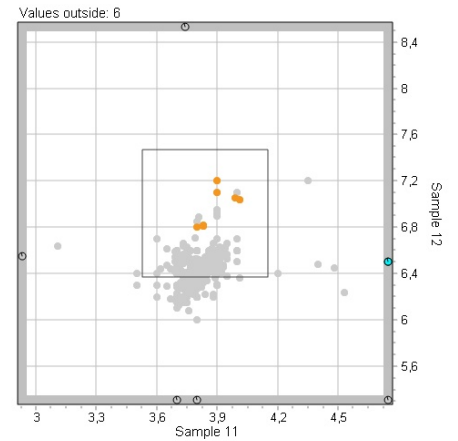
Phosphate (mmol/l, N = 409)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers	11	1.10	0.924 - 1.28	1.10	2.82	409	99.3	99.0	
	12	2.17	1.82 - 2.52	2.17	2.63	409	99.5		

Rate of success: 99%



Potassium (mmol/l, N = 511)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
R.KN, OR, TS	11	3.84	3.53 - 4.15	3.92	3.01	8	87.5	87.5	
	12	6.92	6.37 - 7.47	6.92	3.40	8	100		
Siemens Atellica CH	11	3.84	3.53 - 4.15	3.77	2.10	20	80.0	80.0	
	12	6.45	5.93 - 6.97	6.45	1.26	20	100		
other providers	11	3.84	3.53 - 4.15	3.81	1.89	483	98.8	97.9	
	12	6.45	5.93 - 6.97	6.43	1.76	483	99.0		

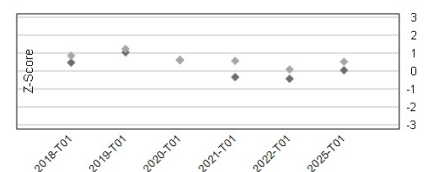
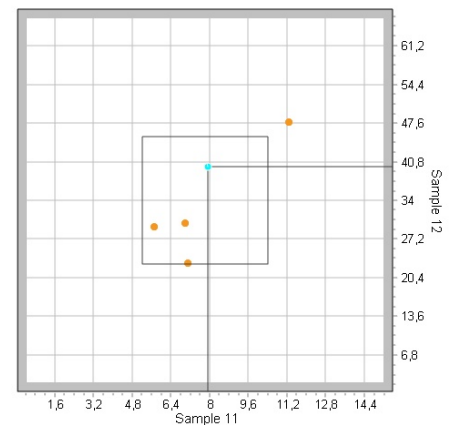
Rate of success: 97,1%



Prostatic Acid Posphtase (U/l, N = 5)									
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers (1)	11	7.80	5.23 - 10.4	7.80	30.6	5			
	12	34.0	22.8 - 45.2	34.0	32.6	5			

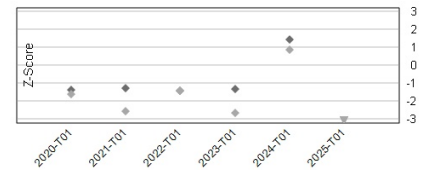
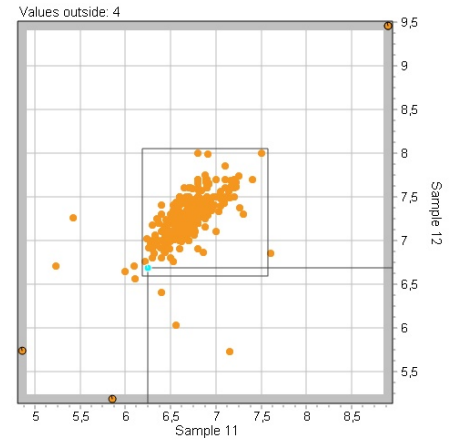
Rate of success: 80%

(1) In individual cases is a statistically valid valuation with consensus value not given, because size of the collective < 8 values.



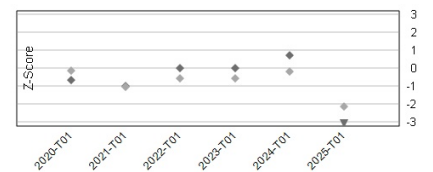
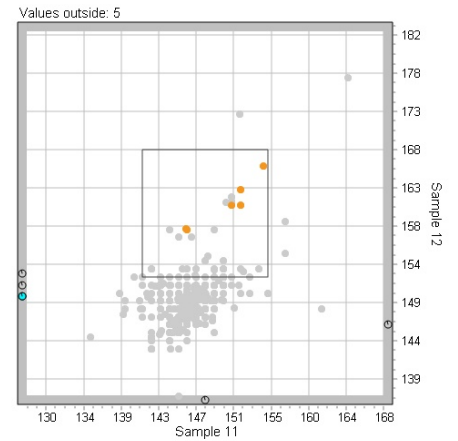
Protein (g/dl, N = 496)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
all providers (RMV)	11	6.88	6.19 - 7.57	6.68	2.63	496	98.0	97.4	
	12	7.32	6.59 - 8.05	7.24	2.75	496	98.4		

Rate of success: 97,4%



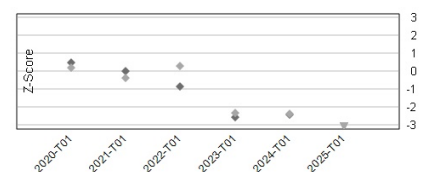
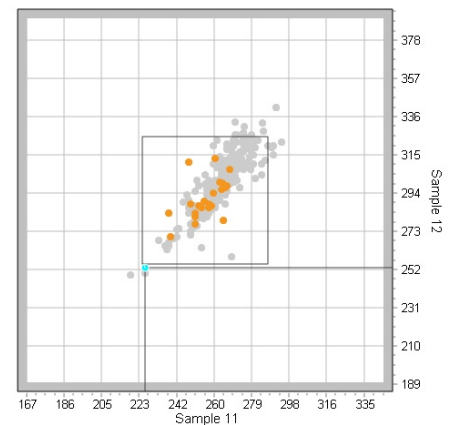
Sodium (mmol/l, N = 510)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
R.KN, OR, TS	11	148	141 - 155	149	3.80	7	85.7	85.7	
	12	160	152 - 168	160	2.99	7	85.7		
ISE, direct potentiometry	11	148	141 - 155	147	2.11	22	95.5	77.3	
	12	150	143 - 158	152	4.08	22	81.8		
Roche Interga Systeme	11	148	141 - 155	143	1.10	28	89.3	89.3	
	12	150	143 - 158	150	0.860	28	100		
other providers	11	148	141 - 155	146	1.21	453	97.8	97.6	
	12	150	143 - 158	148	1.39	453	99.3		

Rate of success: 96,1%



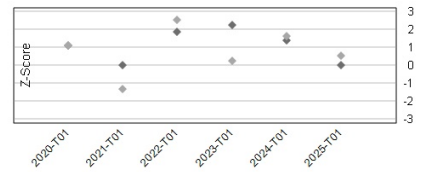
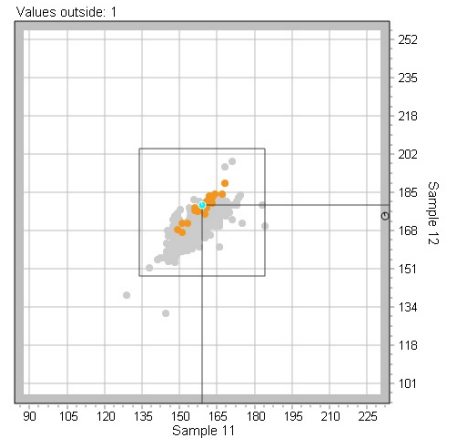
Transferrine (mg/dl, N = 292)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	259	228 - 290	259	2.07	36	100	100	
	12	289	254 - 324	289	2.26	36	100		
Beckman (Olympus)	11	257	226 - 288	257	2.58	24	100	100	
	12	289	254 - 324	289	3.60	24	100		
Siemens Dimension +	11	240	211 - 269	240	3.98	15	100	100	
	12	268	236 - 300	268	3.56	15	100		
Siemens other devices	11	256	225 - 287	256	3.59	23	100	95.7	
	12	290	255 - 325	290	4.14	23	95.7		
Roche / other providers	11	269	237 - 301	269	2.81	194	100	100	
	12	309	272 - 346	309	3.33	194	100		

Rate of success: 99,7%



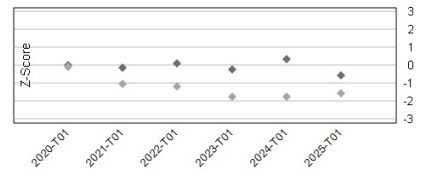
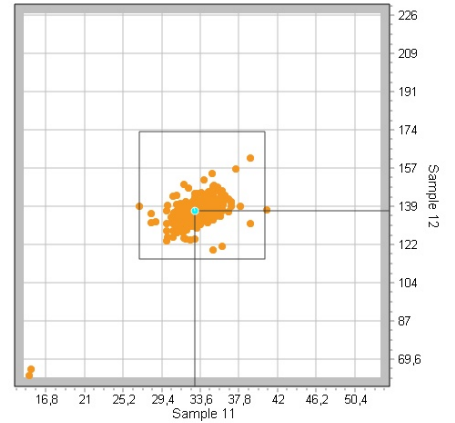
Triglycerides (mg/dl, N = 460)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
Siemens	11	159	134 - 184	159	3.61	20	100	100		
Atellica CH	12	176	148 - 204	178	3.16	20	100			
other providers	11	159	134 - 184	158	4.17	440	99.5	99.3		
	12	176	148 - 204	170	3.27	440	99.5			

Rate of success: 99,3%



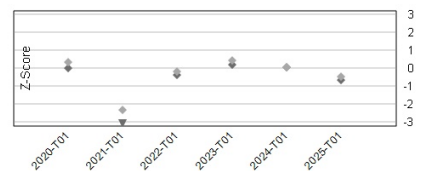
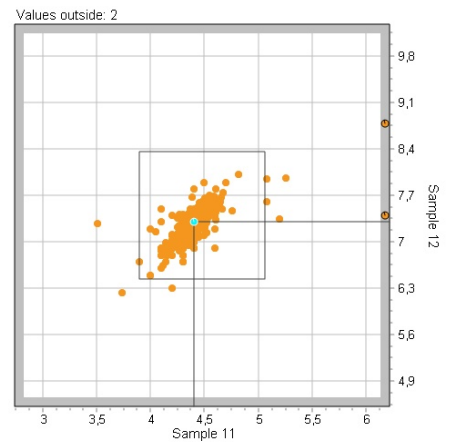
Urea (mg/dl, N = 503)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
all providers	11	33.8	27.0 - 40.6	33.2	4.04	503	99.4	99.4		
	12	144	115 - 173	137	3.25	503	99.6			

Rate of success: 99,4%



Uric Acid (mg/dl, N = 498)										
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
all providers (RMV)	11	4.48	3.90 - 5.06	4.37	2.72	498	98.4	98.2		
	12	7.40	6.44 - 8.36	7.21	2.98	498	99.4			

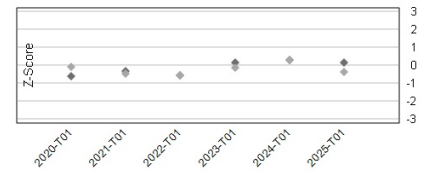
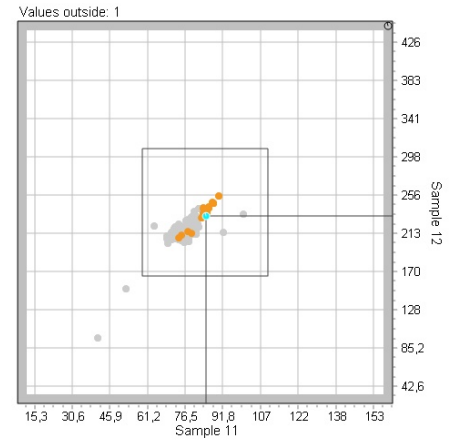
Rate of success: 98,2%



alpha-Amylase (U/l, N = 264)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Abbott	11	72.0	50.4 - 93.6	72.0	1.82	40	100	100	
	12	215	151 - 280	215	2.17	40	100	100	
Beckman (Olympus)	11	79.8	55.9 - 104	79.8	1.73	27	100	100	
	12	228	160 - 296	228	2.18	27	100	100	
Siemens (Dade Behring)	11	71.8	50.3 - 93.3	71.8	2.02	20	95.0	95.0	
	12	210	147 - 273	210	1.98	20	95.0	95.0	
Siemens (BG, SI)	11	84.5	59.2 - 110	84.5	3.55	22	100	100	
	12	236	165 - 307	236	4.19	22	100	100	
Roche	11	77.5	54.3 - 101	77.5	2.06	150	99.3	99.3	
	12	214	150 - 278	214	1.85	150	99.3	99.3	
other providers (1)	11	72.5	50.8 - 94.3	72.5	15.7	5			
	12	211	148 - 274	211	17.1	5			

(1) In individual cases is a statistically valid valuation with consensus value not given, because size of the collective < 8 values.

Rate of success: 99,2%



gamma-Globulins (Electrophoresis) (% , N = 81)									
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)		
				AVG	CV	Num.	Sam.	total	
Capillary Zone Electrophoresis	11	12.9	8.77 - 17.0	12.9	7.83	64	98.4	96.9	
	12	12.9	8.77 - 17.0	12.9	2.88	64	98.4	98.4	
other methods	11	10.3	7.00 - 13.6	10.3	7.32	17	100	100	
	12	11.0	7.48 - 14.5	11.0	4.69	17	100	100	

Rate of success: 97,5%

