

Listing and evaluation of the results





1: Dr. med.Max Mustermann
Laboratory Mustermann

Survey of 29 January 2021

Adviser:

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Antiarrhythmics - Amiodaron

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
Amiodarone	11	mg/l	0.740	0.747	SV	0.568	0.926	-0.9%	-0,135	+	
	12		0.940	0.948	SV	0.720	1.18	-0.8%	-0,116	+	
Desethylamiodarone	11	mg/l	0.820	0.904	SV	0.687	1.12	-9.3%	-1,11	+	
	12		1.81	1.93	SV	1.47	2.39	-6.2%	-0,909	+	

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Detection limit
Amiodarone	11		0.740	1.00	59	RE	ZY99	
	12		0.940	1.00				
Desethylamiodarone	11		0.820	1.00	59	RE	ZY99	
	12		1.81	1.00				

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Anticonvulsants 01

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
Lamotrigine	11	mg/l	6.90	6.91	SV	5.25	8.57	-0.1%	-0,018	+	
	12		15.7	15.5	SV	11.8	19.2	1.3%	0,175	+	
Levetiracetam	11	mg/l	16.0	15.9	SV	12.1	19.7	0.6%	0,064	+	
	12		10.7	10.9	SV	8.28	13.5	-1.8%	-0,194	+	
Sulthiame	11	mg/l	5.80	5.45	SV	4.14	6.76	6.4%	0,902	+	
	12		5.50	5.01	SV	3.81	6.21	9.8%	1,3	+	

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Detection limit
Lamotrigine	11		6.90	1.00	59	RE	ZY99	
	12		15.7	1.00				
Levetiracetam	11	µg/ml	16.0	1.00	171	RE	AP02	
	12		10.7	1.00				
Sulthiame	11		5.80	1.00	59	RE	ZY99	
	12		5.50	1.00				

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Anticonvulsants 02

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
10-OH-Carbamazepine	11	mg/l	34.6	33.3	SV	25.3	41.3	3.9%	0,524	+	
	12	mg/l	13.9	13.9	SV	10.6	17.2	0.0%	0	+	
Carbamazepine-Epoxide	11	mg/l	4.50	4.32	SV	3.28	5.36	4.2%	0,536	+	
	12	mg/l	5.00	4.72	SV	3.59	5.85	5.9%	0,639	+	

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Detection limit
10-OH-Carbamazepine	11		34.6	1.00	59	RE	ZY99	
	12		13.9	1.00				
Carbamazepine-Epoxide	11		4.50	1.00	59	RE	ZY99	
	12		5.00	1.00				

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Therapeutic drug monitoring 01 - Antiepileptic drugs, Digoxin, Lithium, etc.

Analyte	Sample	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
Carbamazepine	11	mg/l	10.2	9.63	SV	7.70	11.6	5.9%	0,963	+	
	12	mg/l	11.8	11.0	SV	8.80	13.2	7.3%	1,13	+	
Digoxin	11	µg/l	0.810	0.867	SV	0.607	1.13	-6.6%	-0,57	+	
	12	µg/l	0.940	0.983	SV	0.688	1.28	-4.4%	-0,426	+	
Ethosuximid	11	mg/l	68.0	65.7	SV	49.9	81.5	3.5%	0,464	+	
	12	mg/l	95.0	91.8	SV	69.8	114	3.5%	0,427	+	
Lithium	11	mmol/l	0.780	0.775	RMV	0.682	0.868	0.6%	0	+	
	12	mmol/l	0.830	0.834	RMV	0.734	0.934	-0.5%	0	+	
Phenobarbital	11	mg/l	26.5	28.1	SV	22.5	33.7	-5.7%	-0,838	+	
	12	mg/l	38.5	38.3	SV	30.6	46.0	0.5%	0,087	+	
Phenytoin	11	mg/l	12.1	12.9	SV	10.3	15.5	-6.2%	-1	+	
	12	mg/l	12.0	11.8	SV	9.44	14.2	1.7%	0,258	+	
Primidon	11	mg/l	4.20	5.24	SV	3.98	6.50	-19.8%	-2,63	+	
	12	mg/l	5.30	6.20	SV	4.71	7.69	-14.5%	-1,63	+	
Theophylline	11	mg/l	9.50	9.73	RMV	7.39	12.1	-2.4%	-0,478	+	
	12	mg/l	17.5	18.2	RMV	13.8	22.6	-3.8%	-0,778	+	
Valproic Acid	11	mg/l	52.4	55.3	SV	44.2	66.4	-5.2%	-0,738	+	
	12	mg/l	66.3	67.2	SV	53.8	80.6	-1.3%	-0,2	+	

Analyte	Sample	Your unit	Stated value	Conversion factor	Method	Manufacturer	Device	Detection limit
Carbamazepine	11	µg/ml	10.2	1.00	242	RO	RO56	
	12	µg/ml	11.8	1.00				
Digoxin	11	ng/ml	0.810	1.00	189	RO	RO88	
	12	ng/ml	0.940	1.00				
Ethosuximid	11		68.0	1.00	59	RE	ZY99	
	12		95.0	1.00				
Lithium	11		0.780	1.00	52	ME	ZY99	
	12		0.830	1.00				
Phenobarbital	11	µg/ml	26.5	1.00	242	RO	RO56	
	12	µg/ml	38.5	1.00				
Phenytoin	11	µg/ml	12.1	1.00	242	RO	RO56	
	12	µg/ml	12.0	1.00				
Primidon	11	µg/ml	4.20	1.00	59	RE	ZY99	
	12	µg/ml	5.30	1.00				
Theophylline	11	µg/ml	9.50	1.00	242	RO	RO56	
	12	µg/ml	17.5	1.00				
Valproic Acid	11	µg/ml	52.4	1.00	64	RO	RO56	
	12	µg/ml	66.3	1.00				



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Therapeutic drug monitoring 02 - Antibiotics, Digitoxin, MTX

Analyte	Sam-ple	Unit	Your value	Target value	TV-Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
Digitoxin	11	µg/l	9.20	7.36	RMV	5.15	9.57	25.0%	1,7	+	
	12		6.90	5.37	RMV	3.76	6.98	28.5%	1,63	+	

Analyte	Sam-ple	Your unit	Stated value	Conversion factor	Method	Manu-facturer	Device	Detection limit
Digitoxin	11	ng/ml	9.20	1.00	189	RO	RO88	
	12		6.90	1.00				



Individual summary of results

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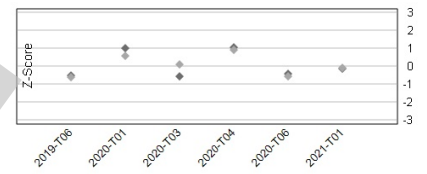
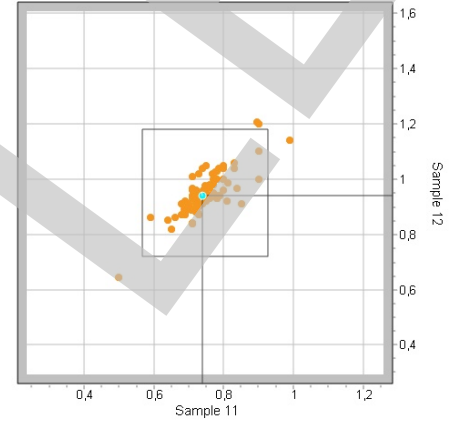
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Antiarrhythmics - Amiodaron

Amiodarone (mg/l, N = 82)

Collective	Sample	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	0.747	0.568 - 0.926	0.747	6.96	82	98.8	96.3
	12	0.948	0.720 - 1.18	0.948	7.28	82	97.6	

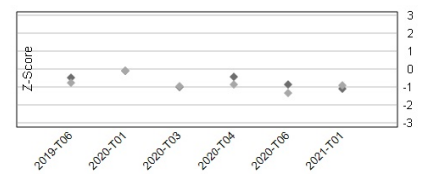
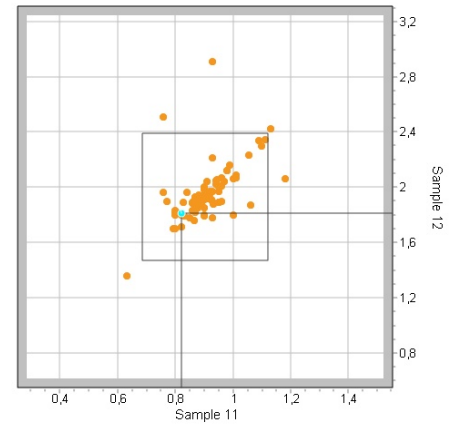
Rate of success: 96,3%



Desethylamiodarone (mg/l, N = 82)

Collective	Sample	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	0.904	0.687 - 1.12	0.904	8.41	82	97.6	95.1
	12	1.93	1.47 - 2.39	1.93	6.84	82	96.3	

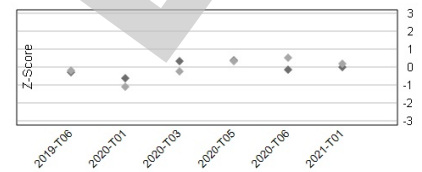
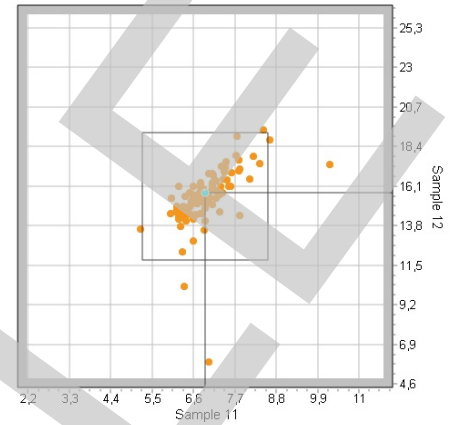
Rate of success: 95,1%





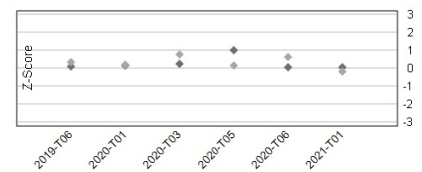
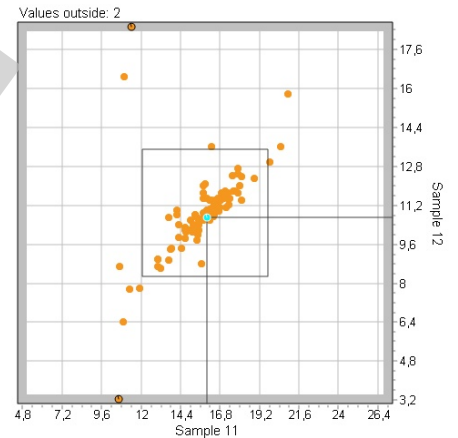
Lamotrigine (mg/l, N = 106)										
Collective	Sample	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
all methods	11	6.91	5.25 - 8.57	6.91	7.83	106	97.2	94.3		
	12	15.5	11.8 - 19.2	15.5	7.35	106	97.2			

Rate of success: 94,3%



Levetiracetam (mg/l, N = 98)										
Collective	Sample	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
all methods	11	15.9	12.1 - 19.7	15.9	9.81	99	89.9	89.8		
	12	10.9	8.28 - 13.5	10.9	9.45	98	92.9			

Rate of success: 89,8%

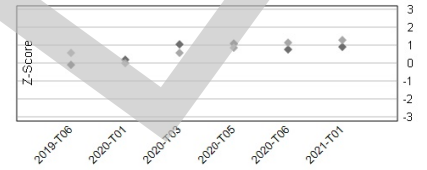
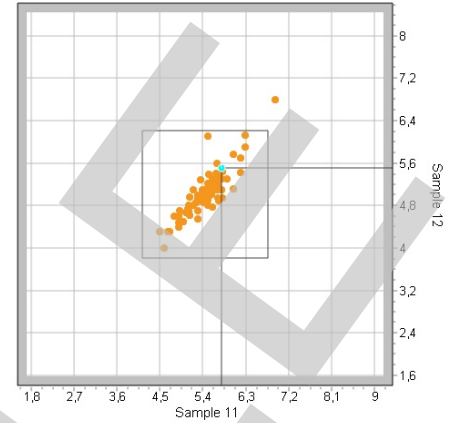




Sulthiame (mg/l, N = 72)

Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	5.45	4.14 - 6.76	5.45	7.12	72	98.6	98.6
	12	5.01	3.81 - 6.21	5.01	7.52	72	98.6	98.6

Rate of success: 98,6%



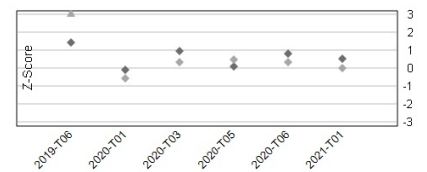
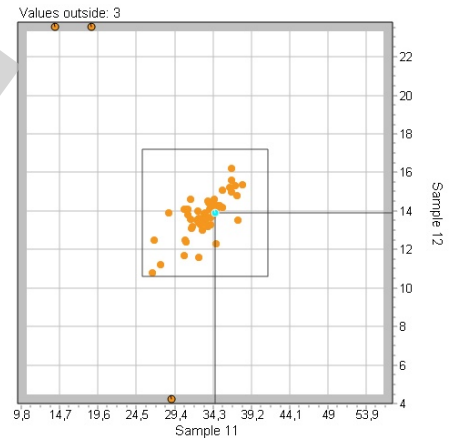
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Anticonvulsants 02

10-OH-Carbamazepine (mg/l, N = 65)

Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	33.3	25.3 - 41.3	33.3	7.45	65	96.9	95.4
	12	13.9	10.6 - 17.2	13.9	6.58	65	95.4	95.4

Rate of success: 95,4%

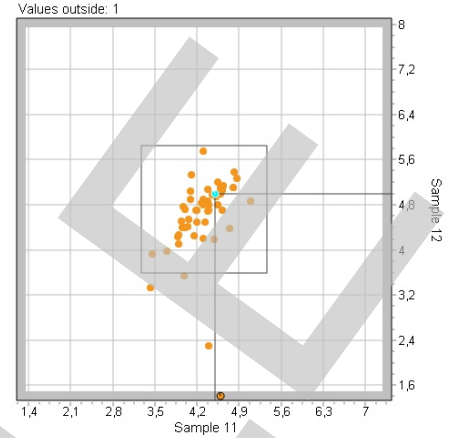




Carbamazepine-Epoxyde (mg/l, N = 54)

Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	4.32	3.28 - 5.36	4.32	7.78	54	100	92.6
	12	4.72	3.59 - 5.85	4.72	9.28	54	92.6	

Rate of success: 92,6%



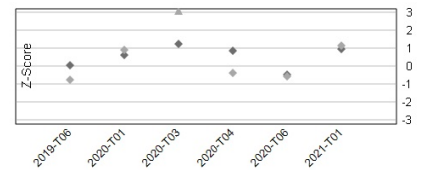
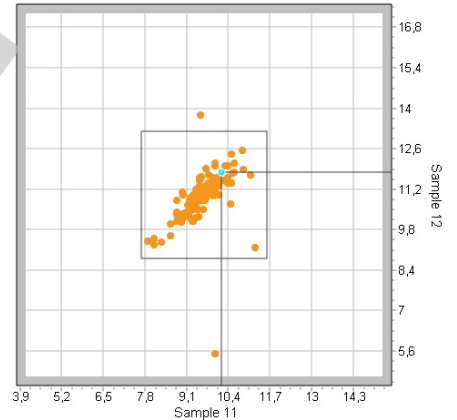
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Therapeutic drug monitoring 01 - Antiepileptic drugs, Digoxin, Lithium, etc.

Carbamacepine (mg/l, N = 107)

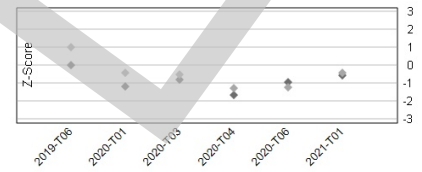
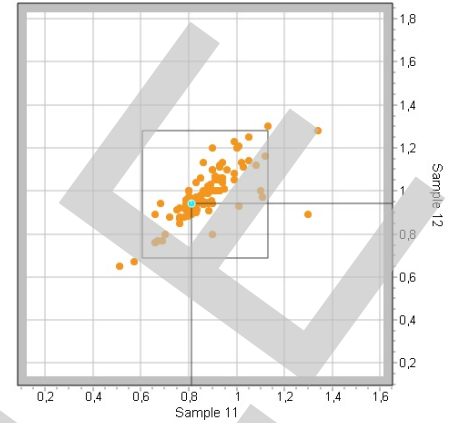
Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	9.63	7.70 - 11.6	9.63	6.15	107	100	98.1
	12	11.0	8.80 - 13.2	11.0	6.43	107	98.1	

Rate of success: 98,1%



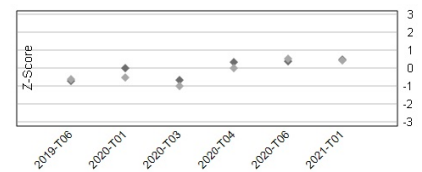
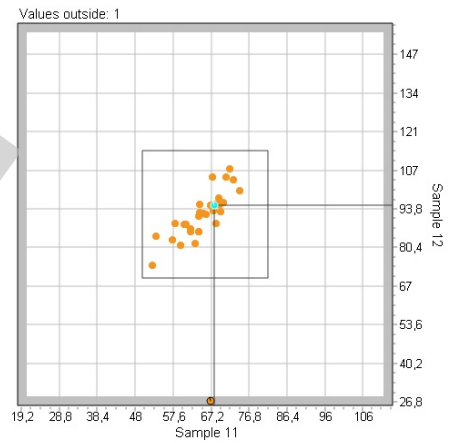
Digoxin (µg/l, N = 109)										
Collective	Sam-ple	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
all methods	11	0.867	0.607	-	1.13	0.867	11.5	109	96.3	95.4
	12	0.983	0.688	-	1.28	0.983	10.3	109	97.2	

Rate of success: 95,4%



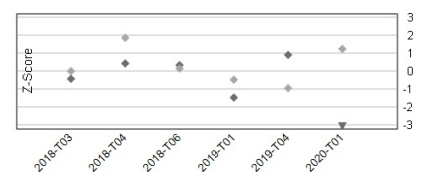
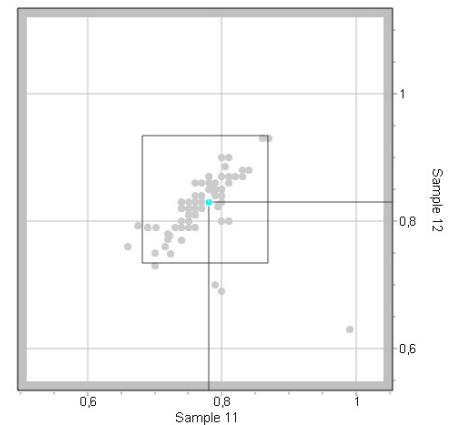
Ethosuximid (mg/l, N = 35)										
Collective	Sam-ple	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
all methods	11	65.7	49.9	-	81.5	65.7	7.55	35	100	97.1
	12	91.8	69.8	-	114	91.8	8.16	35	97.1	

Rate of success: 97,1%



Lithium (mmol/l, N = 79)										
Collective	Sam-ple	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
flame photometry (RMV)	11	0.775	0.682	-	0.868	0.780	0.000	1	100	100
	12	0.834	0.734	-	0.934	0.830	0.000	1	100	
atomic absorption (RMV)	11	0.775	0.682	-	0.868	0.785	3.31	3	100	100
	12	0.834	0.734	-	0.934	0.845	5.09	3	100	
DADE BEHRING (Siemens) (RMV)	11	0.775	0.682	-	0.868	0.729	8.92	7	85.7	57.1
	12	0.834	0.734	-	0.934	0.769	5.98	7	71.4	
Dye-Li-Komplex (RMV)	11	0.775	0.682	-	0.868	0.775	5.16	39	94.9	92.3
	12	0.834	0.734	-	0.934	0.827	5.56	39	94.9	
RMV	11	0.775	0.682	-	0.868	0.764	4.45	29	96.6	96.6
	12	0.834	0.734	-	0.934	0.828	3.86	29	100	

Rate of success: 91,1%

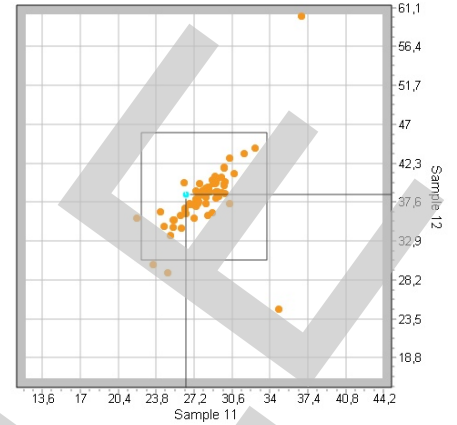




Phenobarbital (mg/l, N = 69)

Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	28.1	22.5 - 33.7	28.1	6.80	69	95.7	92.8
	12	38.3	30.6 - 46.0	38.3	6.03	69	94.2	

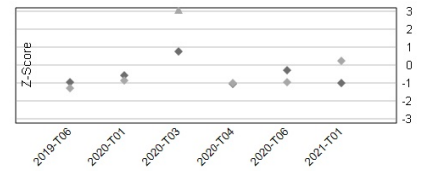
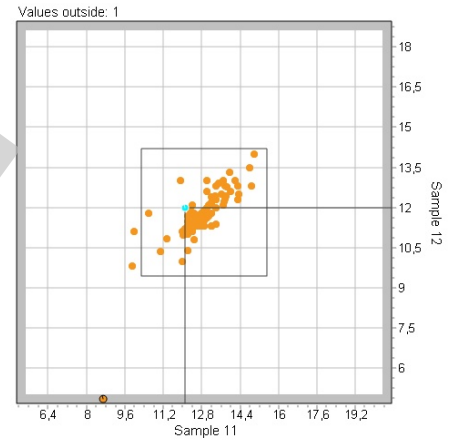
Rate of success: 92,8%



Phenytoin (mg/l, N = 82)

Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	12.9	10.3 - 15.5	12.9	6.20	82	96.3	96.3
	12	11.8	9.44 - 14.2	11.8	6.57	82	98.8	

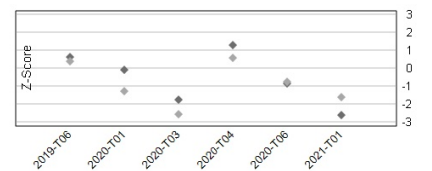
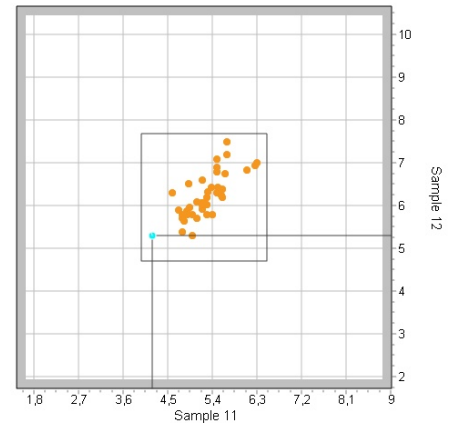
Rate of success: 96,3%



Primidon (mg/l, N = 41)

Collective	Sam-ple	Target value	Target range	Participants collective			Rate (%)	
				AVG	CV	Num.	Sam.	total
all methods	11	5.24	3.98 - 6.50	5.24	7.54	41	100	100
	12	6.20	4.71 - 7.69	6.20	8.89	41	100	

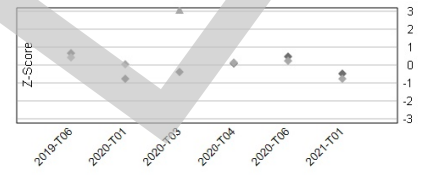
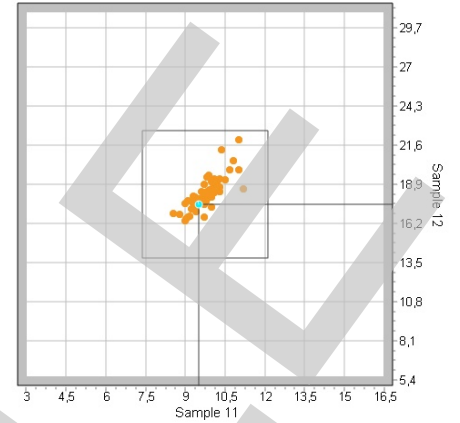
Rate of success: 100%





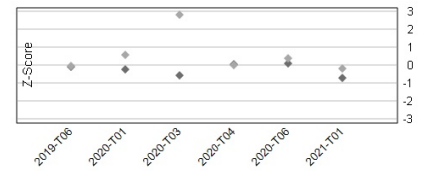
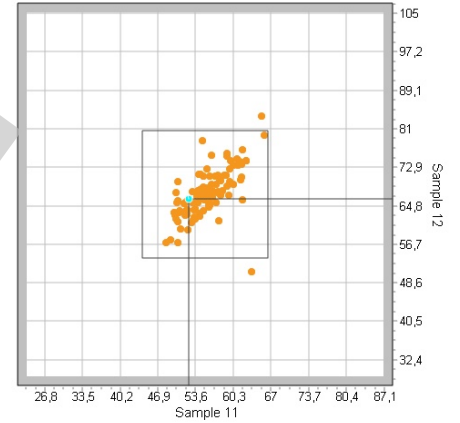
Theophylline (mg/l, N = 69)										
Collective	Sam- ple	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
RMV	11	9.73	7.39	-	12.1	9.74	4.94	69	100	100
	12	18.2	13.8	-	22.6	18.1	4.97	69	100	100

Rate of success: 100%



Valproic Acid (mg/l, N = 111)										
Collective	Sam- ple	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
all methods	11	55.3	44.2	-	66.4	55.3	7.11	111	100	98.2
	12	67.2	53.8	-	80.6	67.2	6.71	111	98.2	98.2

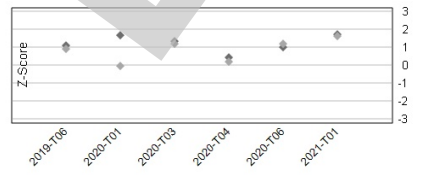
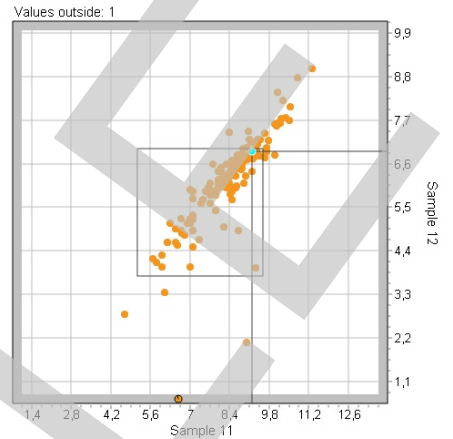
Rate of success: 98,2%





Digitoxin (µg/l, N = 169)										
Collective	Sam- ple	Target value	Target range	Participants collective			Rate (%)			
				AVG	CV	Num.	Sam.	total		
RMV	11	7.36	5.15 - 9.57	8.40	12.9	169	88.8	81.1		
	12	5.37	3.76 - 6.98	6.23	15.1	169	83.4			

Rate of success: 81,1%



EXAMPLE