

Overall Report

Round 78 of
Tumor Markers
External Quality Assessment

Vienna, 22.03.2021

Dear Colleague,

The distribution of samples for round 78 of the external quality assessment scheme Tumor Markers was started on 08.02.2021. The return deadline was 20.02.2021. Statistical analysis and evaluation of results were performed on 22.03.2021.

The following samples were circulated:

Sample option	Name	Manufacturer
A	TM 267 39	RfB
B	TM 267 43	RfB

Explanatory notes on the table columns

Sample	respective sample
AnzE	number of reported results

Metric results

Collective	collective of methods to which your results were assigned
*	collective not evaluated (either because the number of results in the collective is less than 6 or the number of results within the acceptance limits is less than 5); results are given for informative purposes only
Target value	target value assigned to the sample in this round [method used to determine the target value]: [a] Reference value [b] Consensus value
%-Dev	acceptable deviation from target value in %
ALimits	acceptance interval
Inside	number and proportion of results that lie within the acceptance interval
Outside	number and proportion of results that lie outside the acceptance interval
MV	mean
Median	median
SD	Standard deviation
CV	coefficient of variation

Nominal results

Result	results reported by participants
Reference	the result(s) assigned to the sample in the respective round [method used to determine the reference]: [a] Reference value [b] Consensus value
Proportion	Number and proportion of results that correspond to the reference(s)

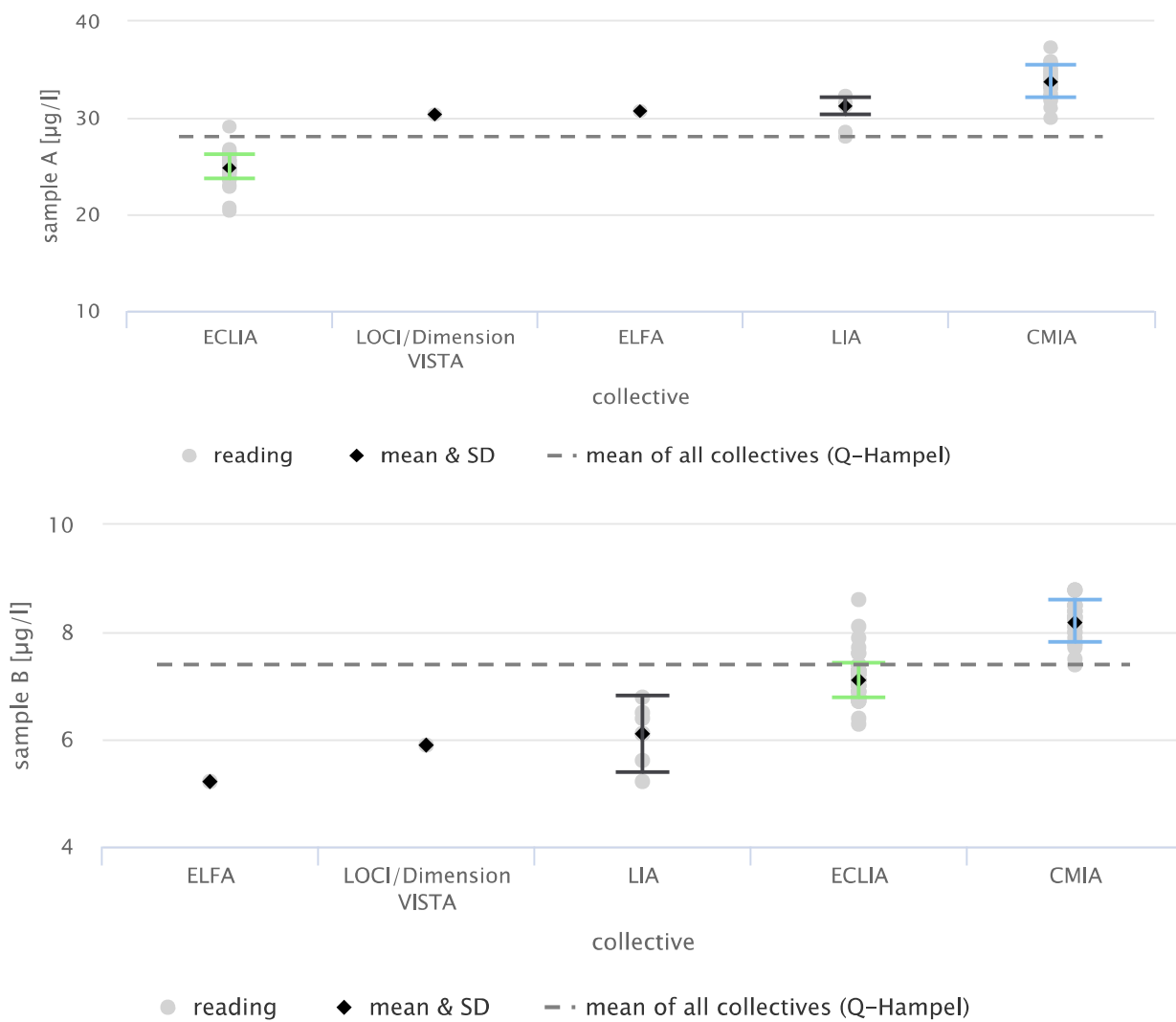
The following results were obtained:

CEA µg/l

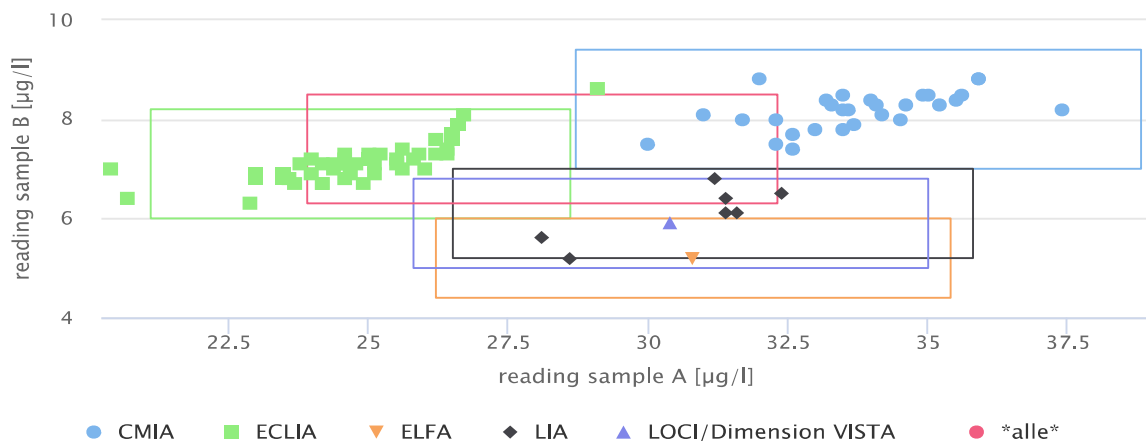
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	87	28.1 [b]	15	[23.9...32.3]	53 (61%)	34 (39%)	28.1	26.4	3.2	11.47
	B	87	7.4 [b]	15	[6.3...8.5]	77 (89%)	10 (11%)	7.4	7.2	0.7	9.71
CMIA	A	29	33.8 [b]	15	[28.7...38.8]	29 (100%)	0 (0%)	33.8	33.6	1.8	5.21
	B	29	8.2 [b]	15	[7.0...9.4]	29 (100%)	0 (0%)	8.2	8.2	0.4	4.94
ECLIA	A	49	24.9 [b]	15	[21.1...28.6]	46 (94%)	3 (6%)	24.9	24.7	1.2	4.92
	B	49	7.1 [b]	15	[6.0...8.2]	48 (98%)	1 (2%)	7.1	7.1	0.3	4.48
ELFA	A	1	30.8 [b]*	15*	[26.2...35.4]*	1 (100%)*	0 (0%)*	30.8*	30.8*	-*	-*
	B	1	5.2 [b]*	15*	[4.4...6.0]*	1 (100%)*	0 (0%)*	5.2*	5.2*	-*	-*
LIA	A	7	31.2 [b]	15	[26.5...35.8]	7 (100%)	0 (0%)	31.2	31.4	0.9	2.79
	B	7	6.1 [b]	15	[5.2...7.0]	7 (100%)	0 (0%)	6.1	6.1	0.7	11.76
LOCI/Dimension VISTA	A	1	30.4 [b]*	15*	[25.8...35.0]*	1 (100%)*	0 (0%)*	30.4*	30.4*	-*	-*
	B	1	5.9 [b]*	15*	[5.0...6.8]*	1 (100%)*	0 (0%)*	5.9*	5.9*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

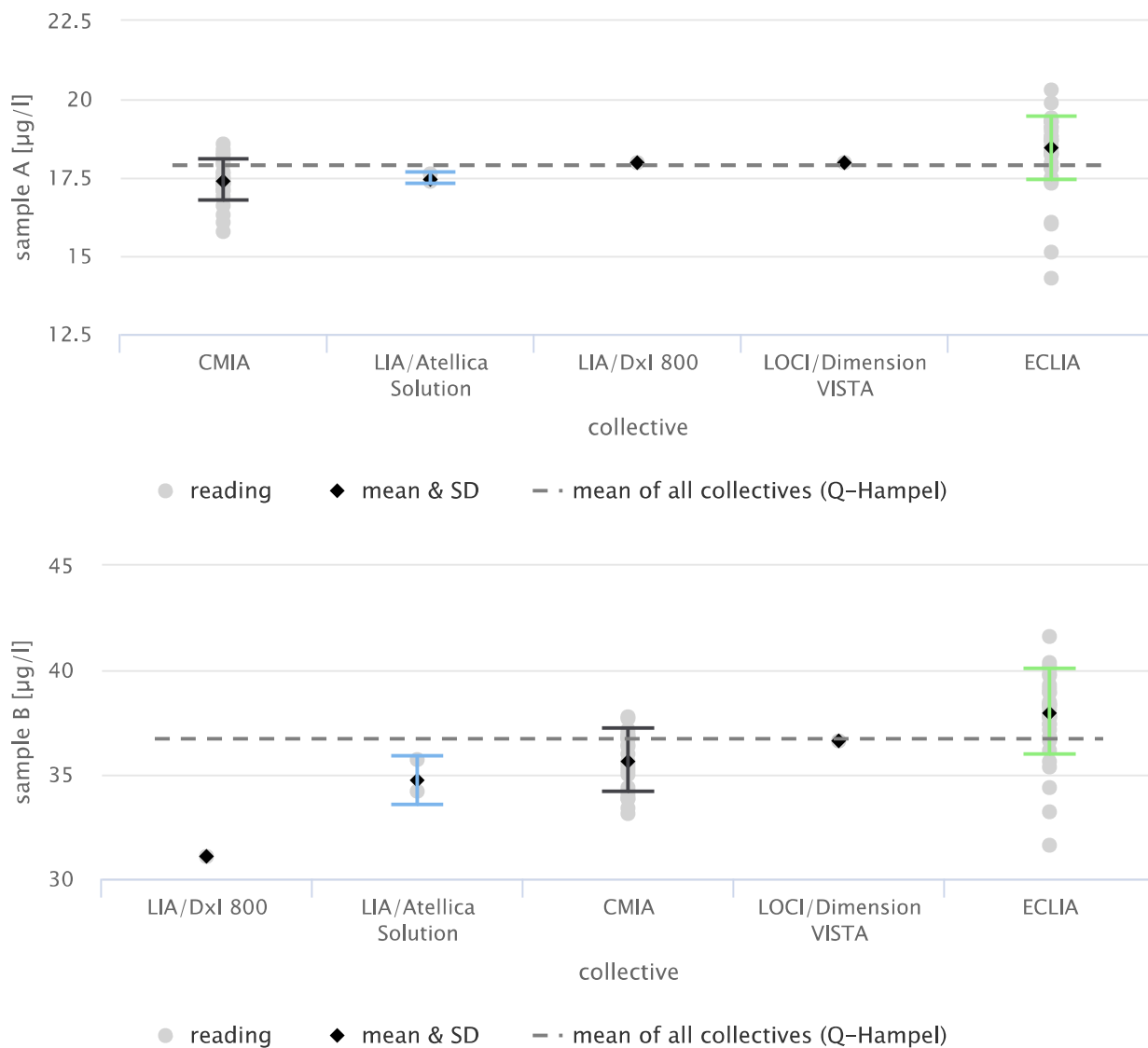


AFP µg/l

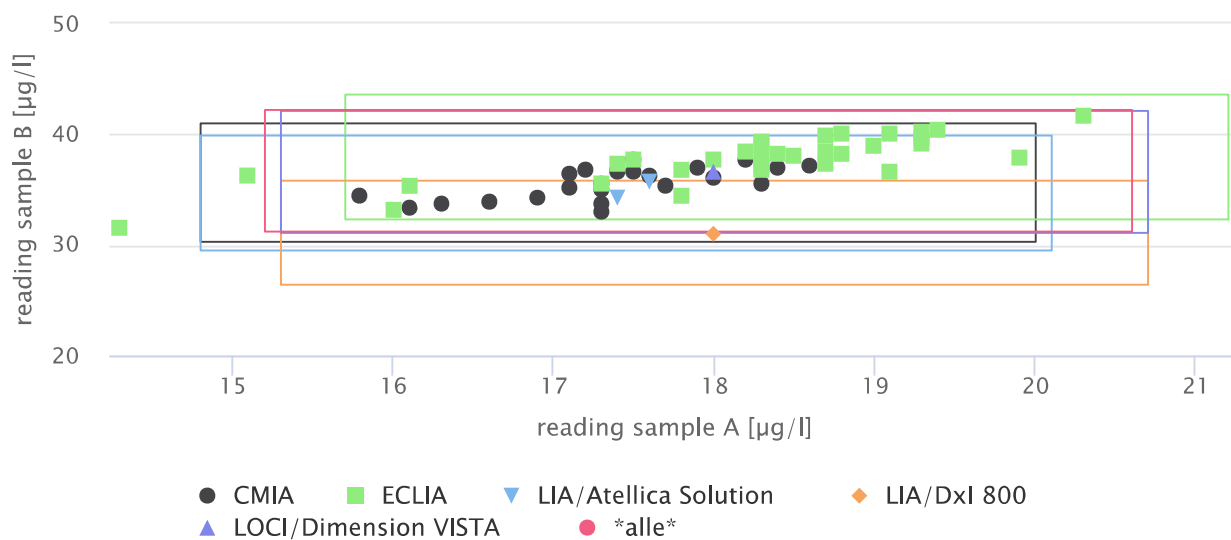
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	61	17.9 [b]	15	[15.2...20.6]	59 (97%)	2 (3%)	17.9	17.9	1.0	5.75
	B	61	36.7 [b]	15	[31.2...42.2]	60 (98%)	1 (2%)	36.7	36.8	2.3	6.40
CMIA	A	24	17.4 [b]	15	[14.8...20.0]	24 (100%)	0 (0%)	17.4	17.4	0.6	3.66
	B	24	35.7 [b]	15	[30.3...41.0]	24 (100%)	0 (0%)	35.7	35.8	1.5	4.32
ECLIA	A	32	18.4 [b]	15	[15.7...21.2]	30 (94%)	2 (6%)	18.4	18.4	1.0	5.41
	B	32	38.0 [b]	15	[32.3...43.6]	31 (97%)	1 (3%)	38.0	38.0	2.1	5.41
LIA/Atellica Solution	A	3	17.5 [b]*	15*	[14.8...20.1]*	3 (100%)*	0 (0%)*	17.5*	17.4*	0.2*	0.90*
	B	3	34.7 [b]*	15*	[29.5...39.9]*	3 (100%)*	0 (0%)*	34.7*	34.2*	1.2*	3.40*
LIA/Dxl 800	A	1	18.0 [b]*	15*	[15.3...20.7]*	1 (100%)*	0 (0%)*	18.0*	18.0*	-*	-*
	B	1	31.1 [b]*	15*	[26.4...35.8]*	1 (100%)*	0 (0%)*	31.1*	31.1*	-*	-*
LOCI/Dimension VISTA	A	1	18.0 [b]*	15*	[15.3...20.7]*	1 (100%)*	0 (0%)*	18.0*	18.0*	-*	-*
	B	1	36.6 [b]*	15*	[31.1...42.1]*	1 (100%)*	0 (0%)*	36.6*	36.6*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

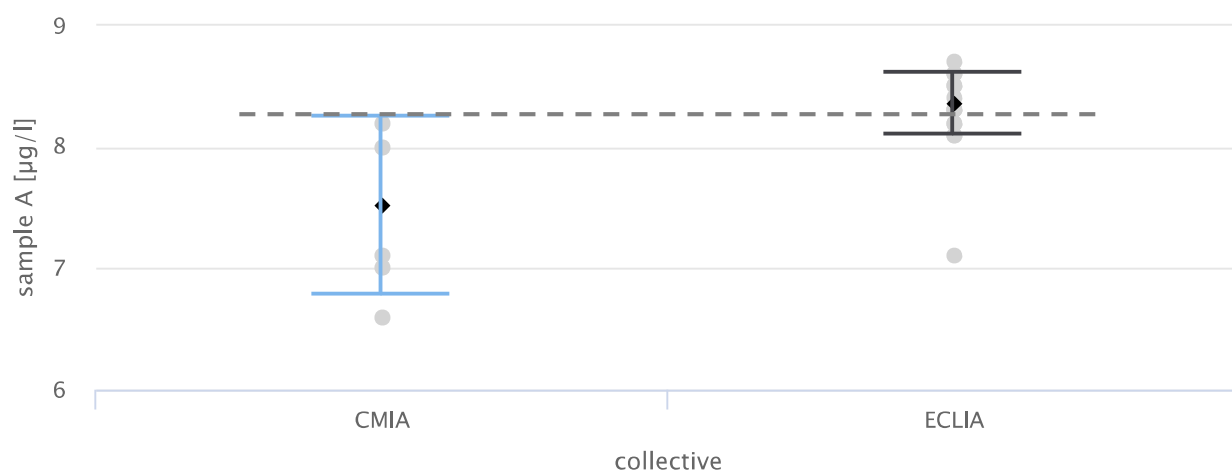


CYFRA (21-1) µg/l

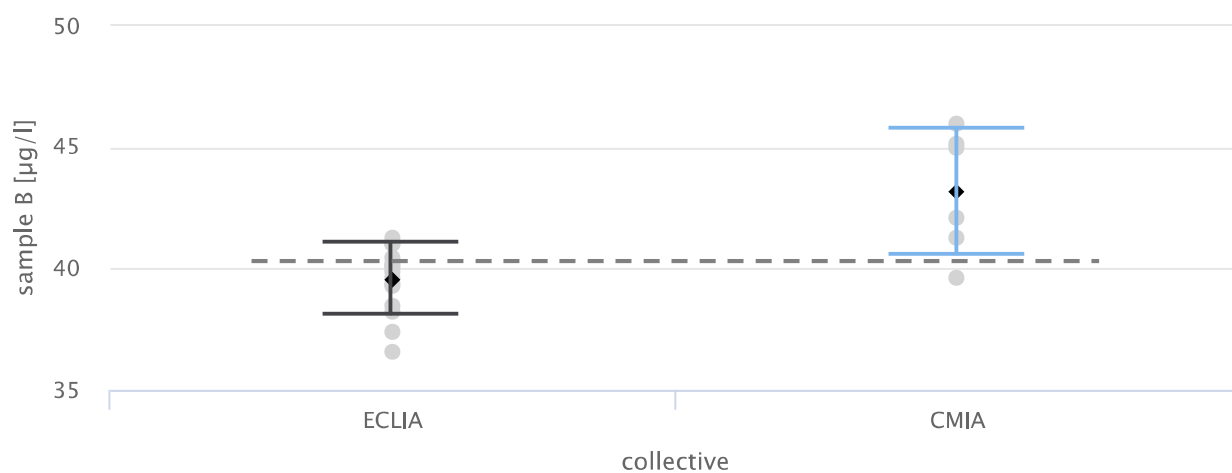
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	21	8.3 [b]	15	[7.0...9.5]	20 (95%)	1 (5%)	8.3	8.2	0.3	3.97
	B	21	40.3 [b]	15	[34.3...46.4]	21 (100%)	0 (0%)	40.3	40.1	2.0	4.86
CMIA	A	6	7.5 [b]	15	[6.4...8.6]	6 (100%)	0 (0%)	7.5	7.5	0.7	9.77
	B	6	43.2 [b]	15	[36.7...49.7]	6 (100%)	0 (0%)	43.2	43.5	2.6	6.04
ECLIA	A	15	8.4 [b]	15	[7.1...9.6]	15 (100%)	0 (0%)	8.4	8.3	0.3	3.11
	B	15	39.6 [b]	15	[33.6...45.5]	15 (100%)	0 (0%)	39.6	39.9	1.5	3.81

S-Curves of all samples

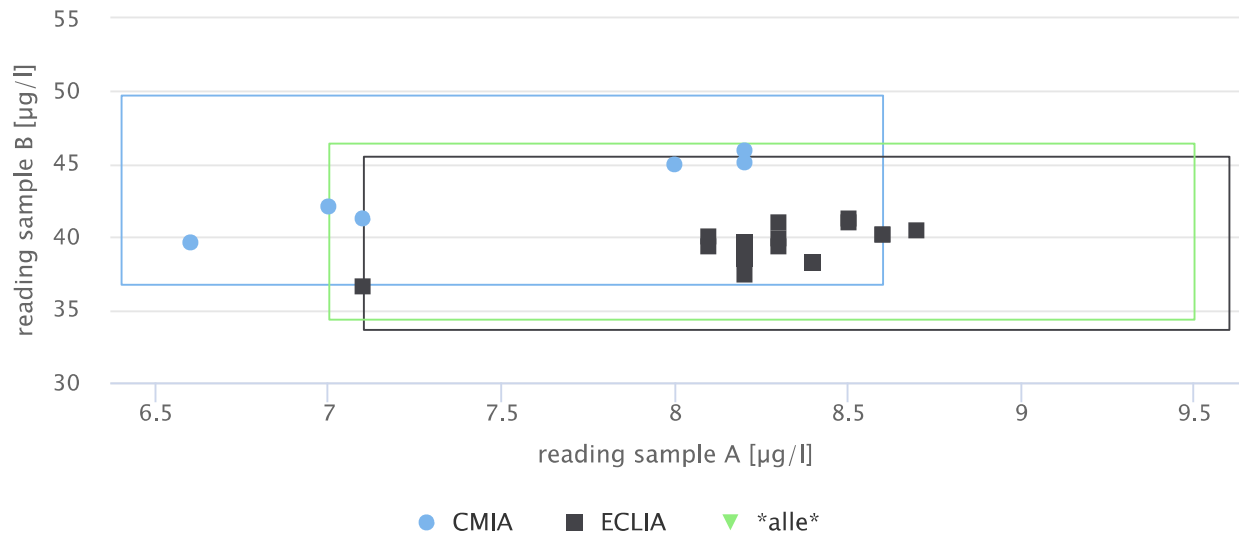


● reading ◆ mean & SD - · - mean of all collectives (Q-Hampel)



● reading ◆ mean & SD - · - mean of all collectives (Q-Hampel)

Youden-Plots of all sample pairs

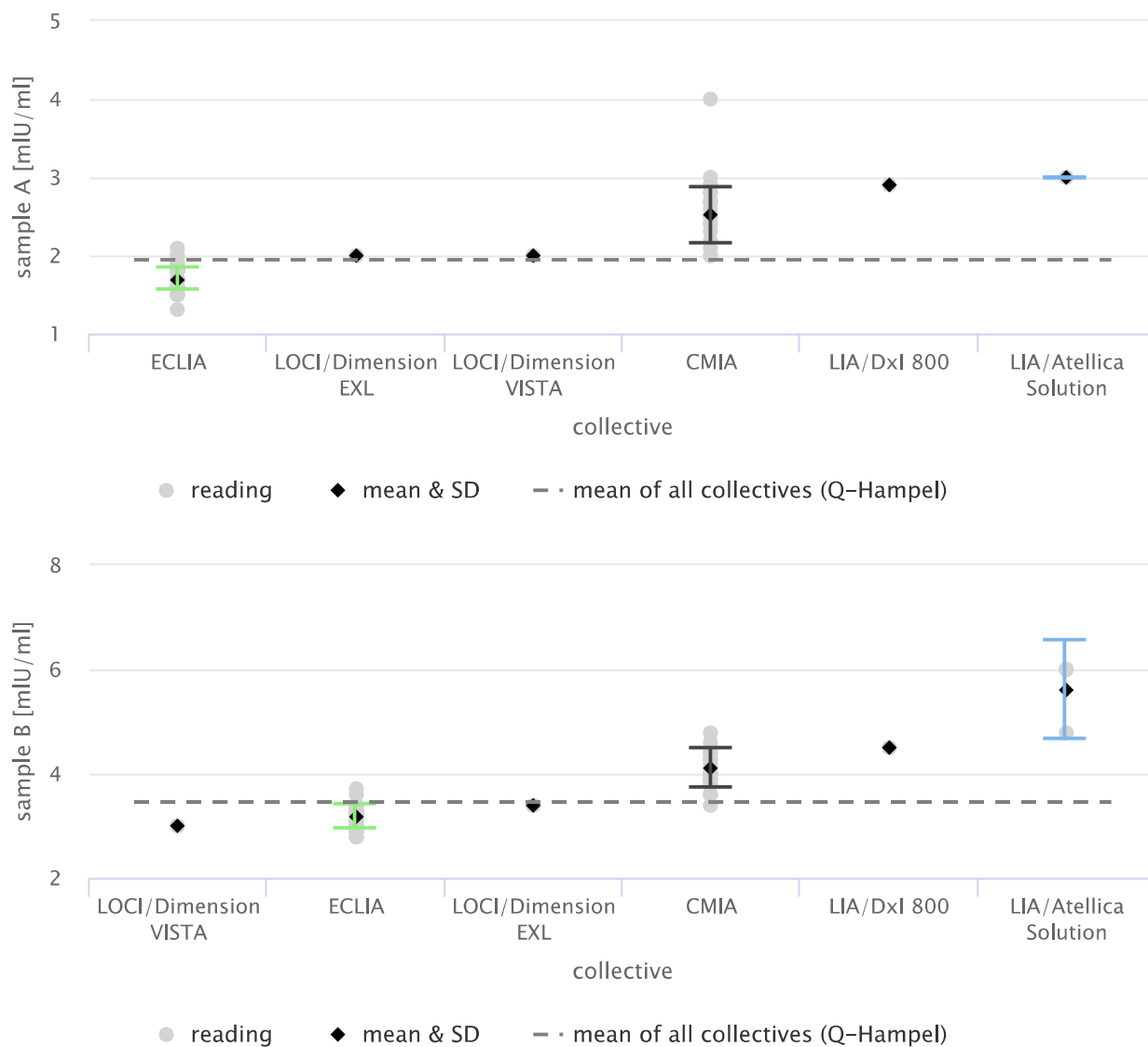


hCGβ mIU/ml

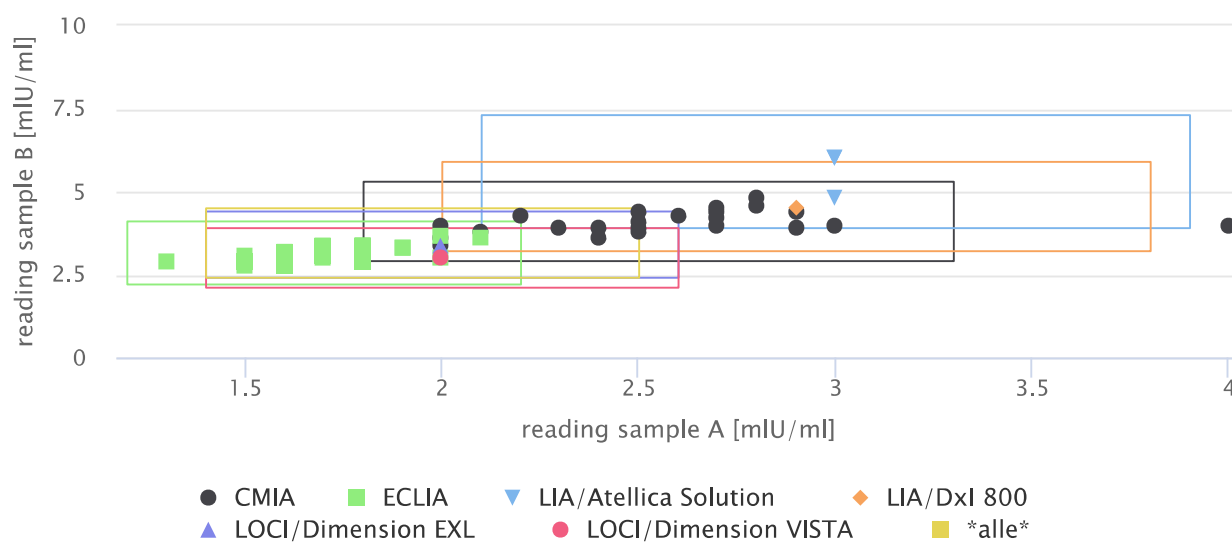
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	79	1.9 [b]	30	[1.4...2.5]	62 (78%)	17 (22%)	1.9	1.8	0.3	17.90
	B	79	3.5 [b]	30	[2.4...4.5]	74 (94%)	5 (6%)	3.5	3.4	0.5	13.76
CMIA	A	24	2.5 [b]	30	[1.8...3.3]	23 (96%)	1 (4%)	2.5	2.5	0.4	14.15
	B	24	4.1 [b]	30	[2.9...5.3]	24 (100%)	0 (0%)	4.1	4.0	0.4	9.15
ECLIA	A	49	1.7 [b]	30	[1.2...2.2]	49 (100%)	0 (0%)	1.7	1.7	0.1	8.44
	B	49	3.2 [b]	30	[2.2...4.1]	49 (100%)	0 (0%)	3.2	3.2	0.2	7.07
LIA/Atellica Solution	A	3	3.0 [b]*	30*	[2.1...3.9]*	3 (100%)*	0 (0%)*	3.0*	3.0*	0.0*	0.00*
	B	3	5.6 [b]*	30*	[3.9...7.3]*	3 (100%)*	0 (0%)*	5.6*	6.0*	0.9*	16.85*
LIA/Dxl 800	A	1	2.9 [b]*	30*	[2.0...3.8]*	1 (100%)*	0 (0%)*	2.9*	2.9*	-*	-*
	B	1	4.5 [b]*	30*	[3.2...5.9]*	1 (100%)*	0 (0%)*	4.5*	4.5*	-*	-*
LOCI/Dimension EXL	A	1	2.0 [b]*	30*	[1.4...2.6]*	1 (100%)*	0 (0%)*	2.0*	2.0*	-*	-*
	B	1	3.4 [b]*	30*	[2.4...4.4]*	1 (100%)*	0 (0%)*	3.4*	3.4*	-*	-*
LOCI/Dimension VISTA	A	1	2.0 [b]*	30*	[1.4...2.6]*	1 (100%)*	0 (0%)*	2.0*	2.0*	-*	-*
	B	1	3.0 [b]*	30*	[2.1...3.9]*	1 (100%)*	0 (0%)*	3.0*	3.0*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

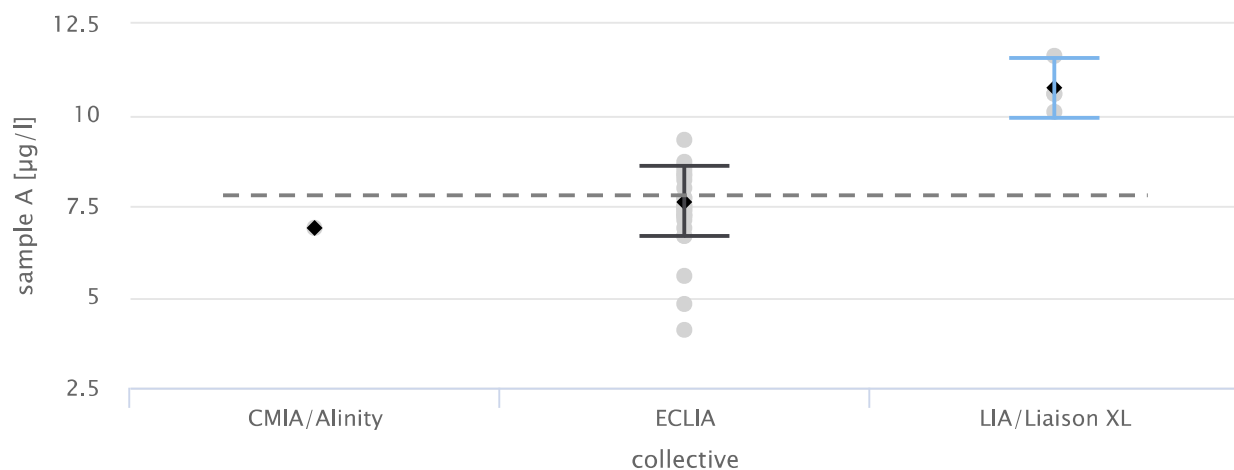


NSE µg/l

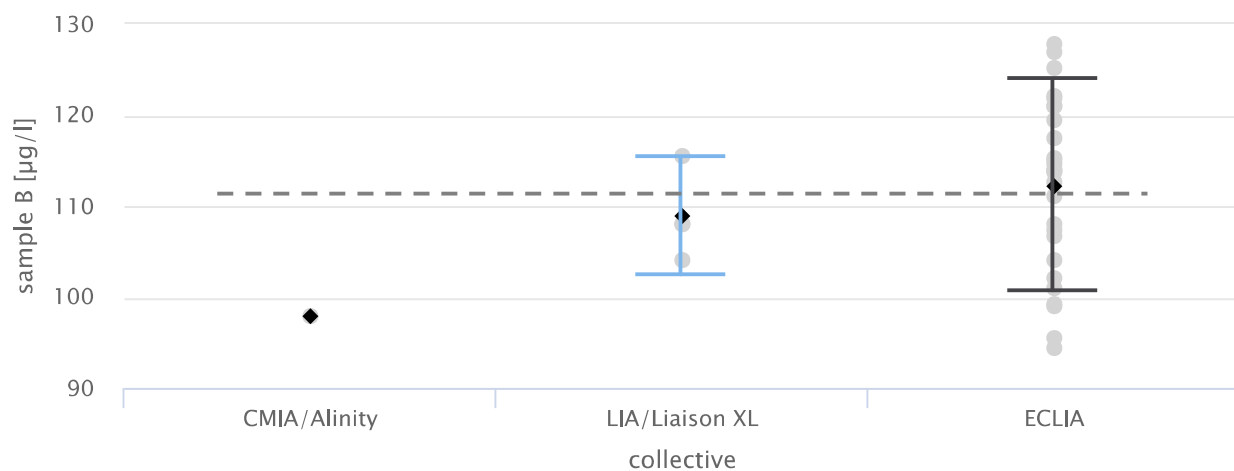
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	32	7.8 [b]	15	[6.6...9.0]	24 (75%)	8 (25%)	7.8	7.6	1.2	15.84
	B	32	111.4 [b]	15	[94.7...128.1]	31 (97%)	1 (3%)	111.4	113.2	11.4	10.26
CMIA/Alinity	A	1	6.9 [b]*	15*	[5.9...7.9]*	1 (100%)*	0 (0%)*	6.9*	6.9*	-*	-*
	B	1	98.0 [b]*	15*	[83.3...112.7]*	1 (100%)*	0 (0%)*	98.0*	98.0*	-*	-*
ECLIA	A	27	7.6 [b]	15	[6.5...8.7]	23 (85%)	4 (15%)	7.6	7.5	1.0	12.60
	B	27	112.2 [b]	15	[95.4...129.1]	26 (96%)	1 (4%)	112.2	114.0	11.7	10.39
LIA/Liaison XL	A	4	10.7 [b]*	15*	[9.1...12.3]*	4 (100%)*	0 (0%)*	10.7*	10.6*	0.8*	7.59*
	B	4	108.9 [b]*	15*	[92.5...125.2]*	4 (100%)*	0 (0%)*	108.9*	108.0*	6.4*	5.90*

S-Curves of all samples

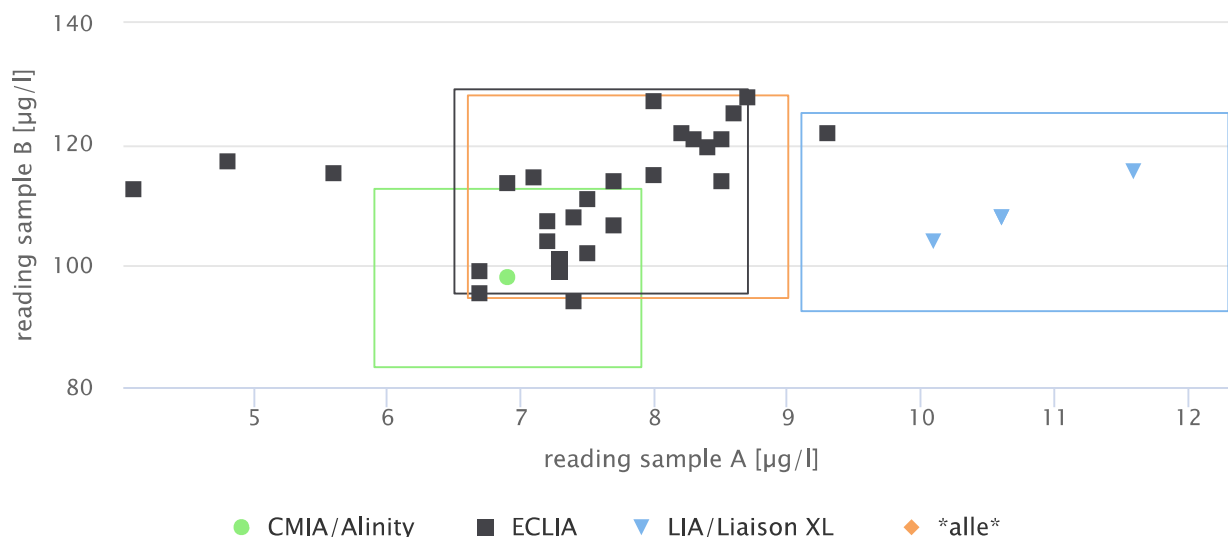


● reading ♦ mean & SD — · mean of all collectives (Q-Hampel)



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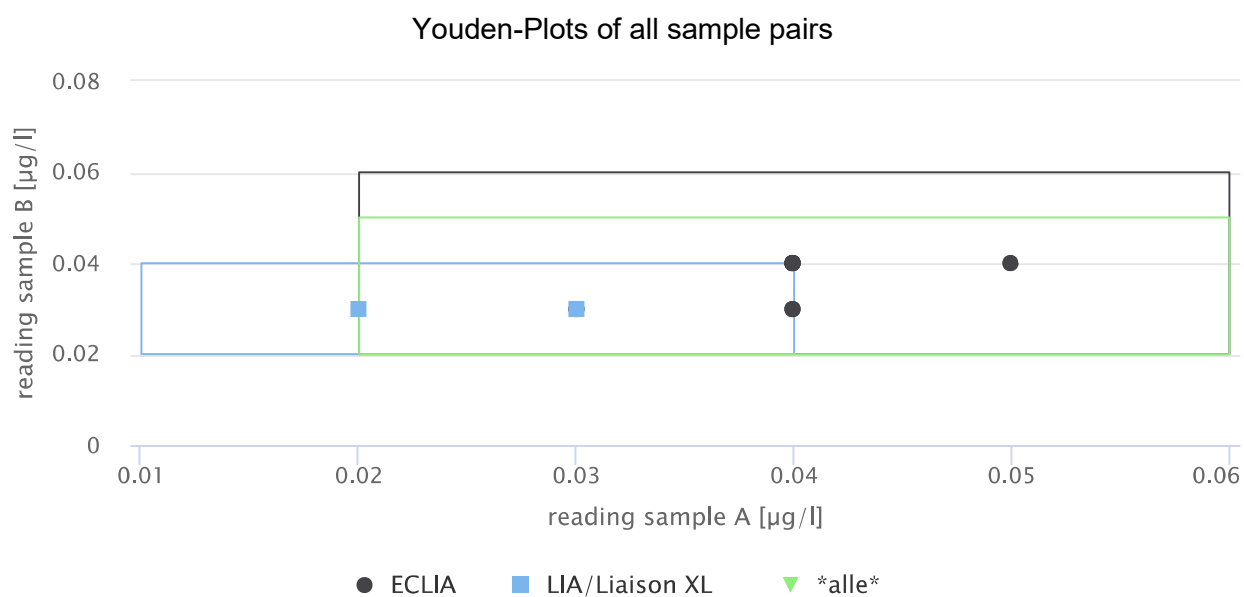
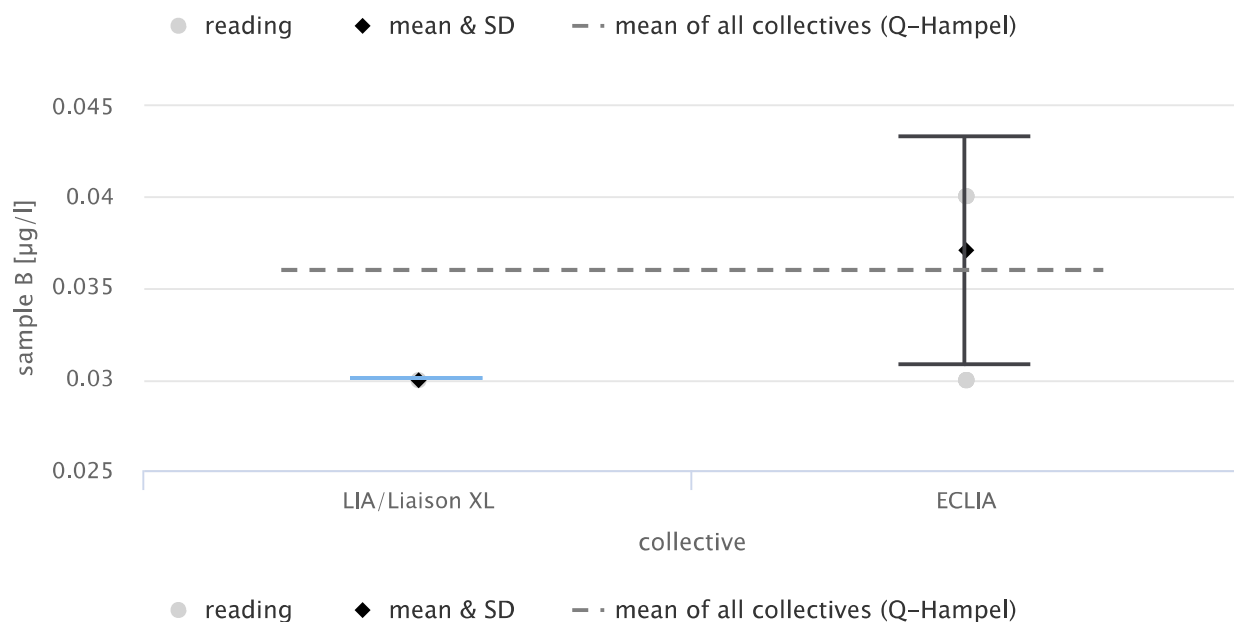
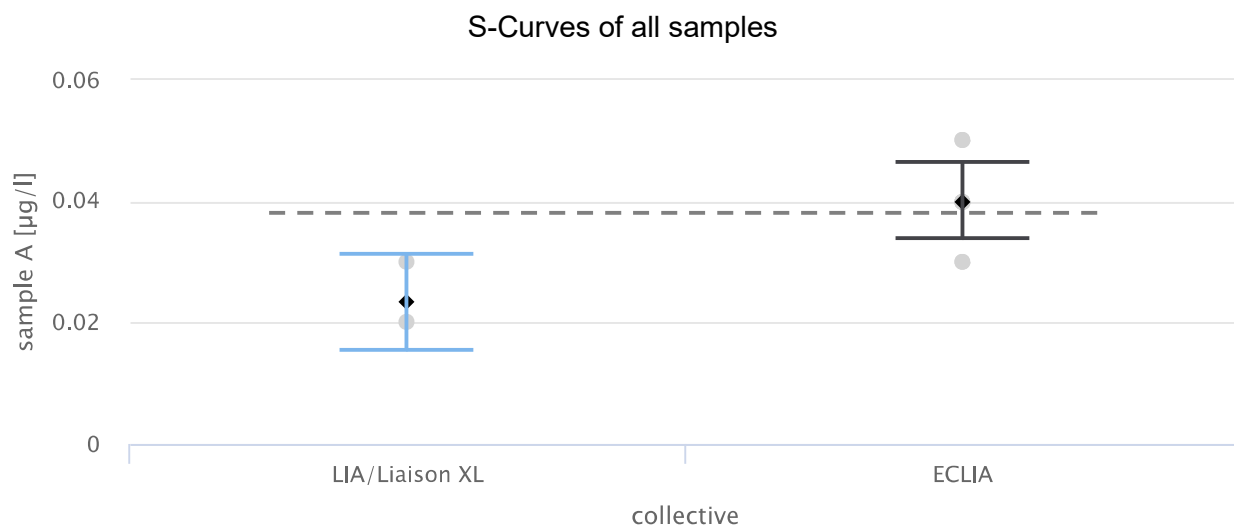
Youden-Plots of all sample pairs



S - 100 µg/l

Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	20	0.04 [b]	50	[0.02...0.06]	20 (100%)	0 (0%)	0.04	0.04	0.01	21.43
	B	20	0.04 [b]	50	[0.02...0.05]	20 (100%)	0 (0%)	0.04	0.04	0.01	18.55
ECLIA	A	17	0.04 [b]	50	[0.02...0.06]	17 (100%)	0 (0%)	0.04	0.04	0.01	15.40
	B	17	0.04 [b]	50	[0.02...0.06]	17 (100%)	0 (0%)	0.04	0.04	0.01	16.85
LIA/Liaison XL	A	3	0.02 [b]*	50*	[0.01...0.04]*	3 (100%)*	0 (0%)*	0.02*	0.02*	0.01*	33.70*
	B	3	0.03 [b]*	50*	[0.02...0.04]*	3 (100%)*	0 (0%)*	0.03*	0.03*	0.00*	0.00*

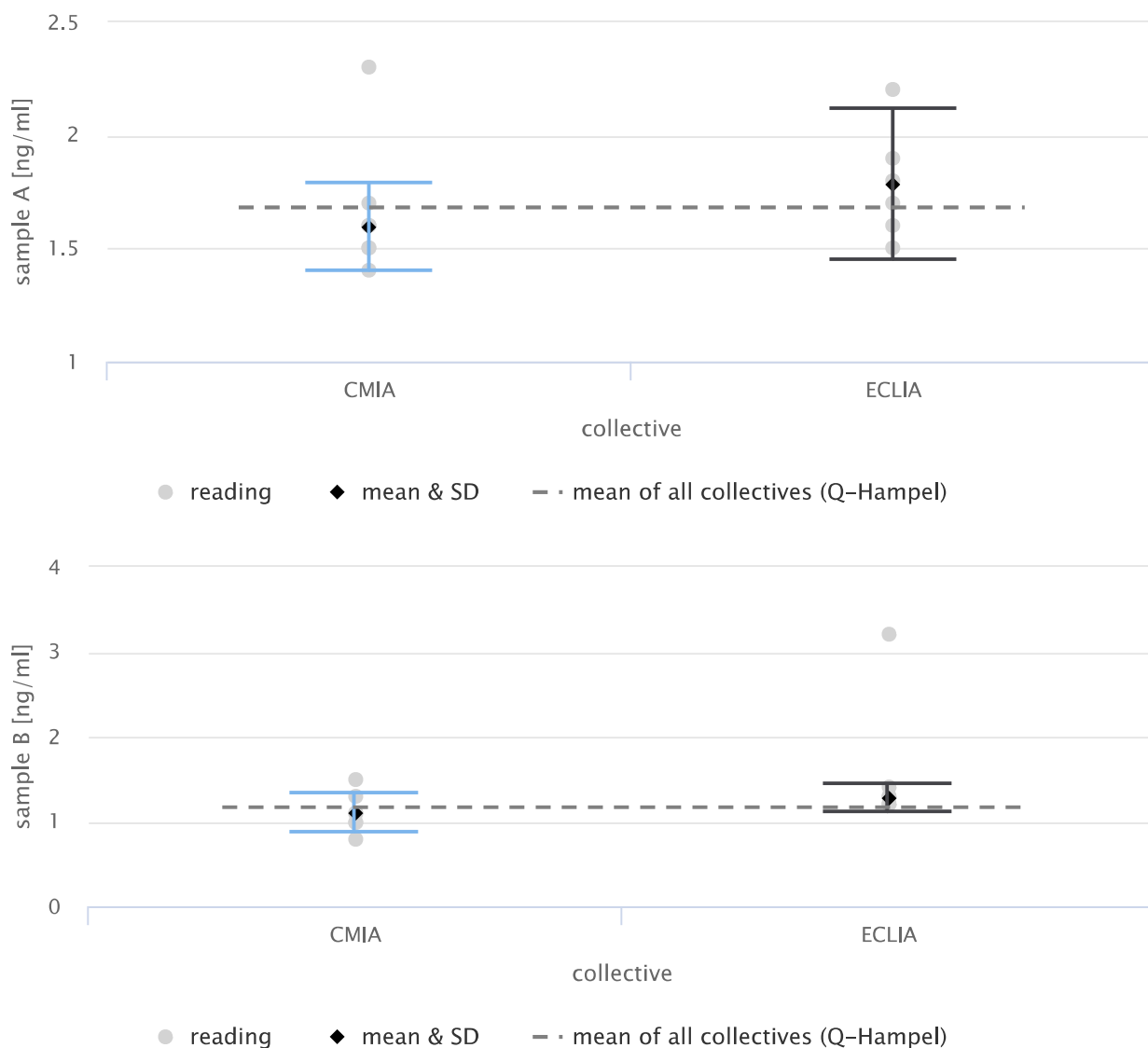


SCC ng/ml

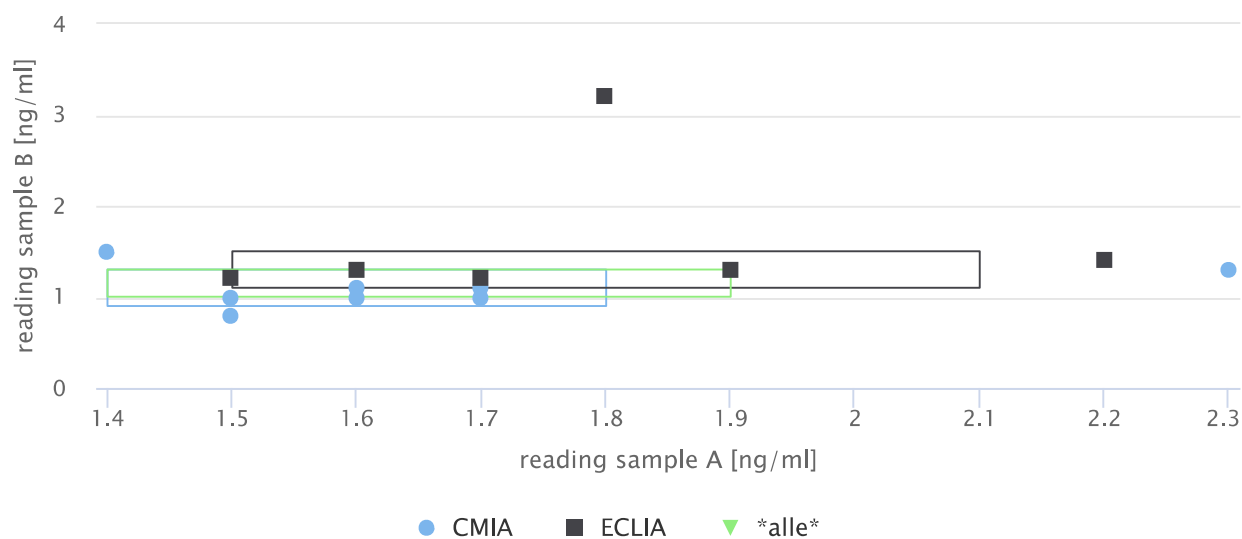
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	14	1.7 [b]	15	[1.4...1.9]	¹² (86%)	2 (14%)	1.7	1.6	0.2	13.48
	B	14	1.2 [b]	15	[1.0...1.3]	¹⁰ (71%)	4 (29%)	1.2	1.2	0.3	22.85
CMIA	A	8	1.6 [b]	15	[1.4...1.8]	7 (88%)	1 (12%)	1.6	1.6	0.2	12.02
	B	8	1.1 [b]	15	[0.9...1.3]	6 (75%)	2 (25%)	1.1	1.1	0.2	20.95
ECLIA	A	6	1.8 [b]	15	[1.5...2.1]	5 (83%)	1 (17%)	1.8	1.8	0.3	18.67
	B	6	1.3 [b]	15	[1.1...1.5]	5 (83%)	1 (17%)	1.3	1.3	0.2	12.94

S-Curves of all samples



Youden-Plots of all sample pairs

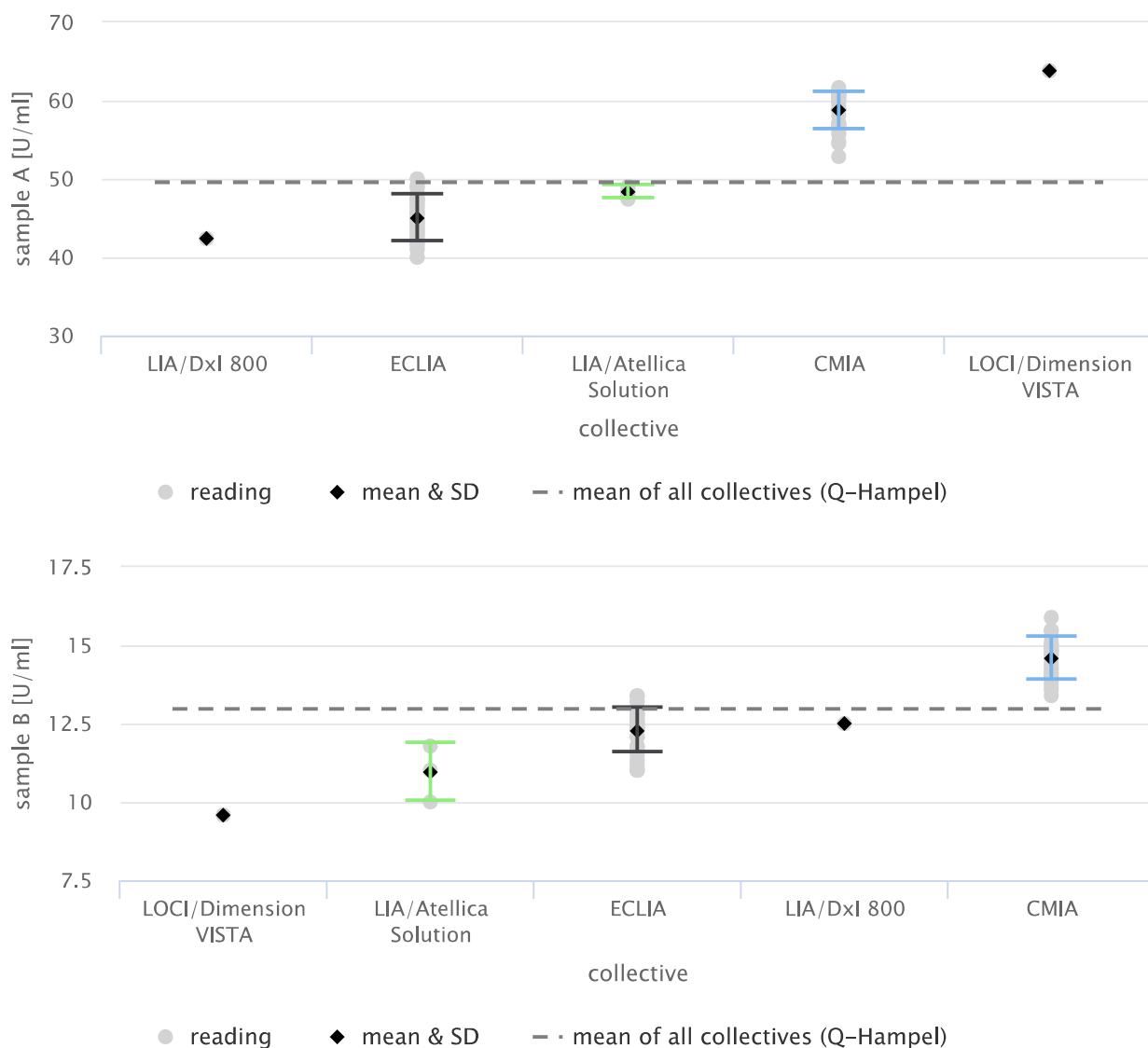


CA 125 U/ml

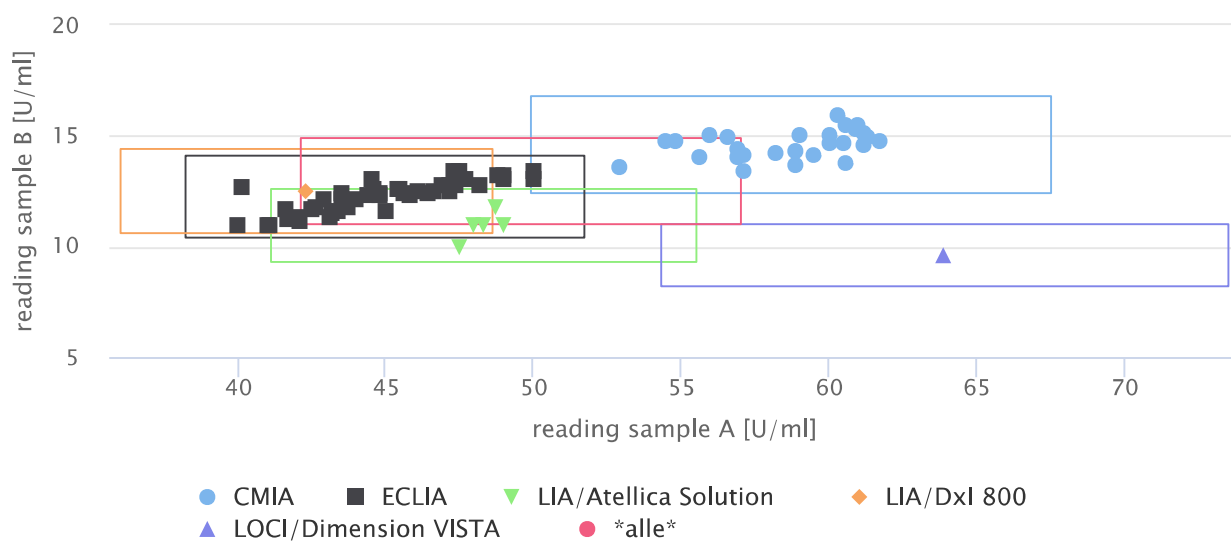
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	78	49.6 [b]	15	[42.1...57.0]	51 (65%)	27 (35%)	49.6	47.6	5.6	11.38
	B	78	13.0 [b]	15	[11.0...14.9]	68 (87%)	10 (13%)	13.0	12.8	1.5	11.37
CMIA	A	27	58.7 [b]	15	[49.9...67.5]	27 (100%)	0 (0%)	58.7	59.0	2.3	3.94
	B	27	14.6 [b]	15	[12.4...16.8]	27 (100%)	0 (0%)	14.6	14.7	0.7	4.59
ECLIA	A	44	44.9 [b]	15	[38.2...51.7]	44 (100%)	0 (0%)	44.9	44.8	3.0	6.68
	B	44	12.3 [b]	15	[10.4...14.1]	44 (100%)	0 (0%)	12.3	12.4	0.7	6.02
LIA/Atellica Solution	A	5	48.3 [b]*	15*	[41.1...55.5]*	5 (100%)*	0 (0%)*	48.3*	48.3*	0.9*	1.84*
	B	5	11.0 [b]*	15*	[9.3...12.6]*	5 (100%)*	0 (0%)*	11.0*	11.0*	0.9*	8.29*
LIA/Dxl 800	A	1	42.3 [b]*	15*	[36.0...48.6]*	1 (100%)*	0 (0%)*	42.3*	42.3*	-*	-*
	B	1	12.5 [b]*	15*	[10.6...14.4]*	1 (100%)*	0 (0%)*	12.5*	12.5*	-*	-*
LOCI/Dimension VISTA	A	1	63.9 [b]*	15*	[54.3...73.5]*	1 (100%)*	0 (0%)*	63.9*	63.9*	-*	-*
	B	1	9.6 [b]*	15*	[8.2...11.0]*	1 (100%)*	0 (0%)*	9.6*	9.6*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

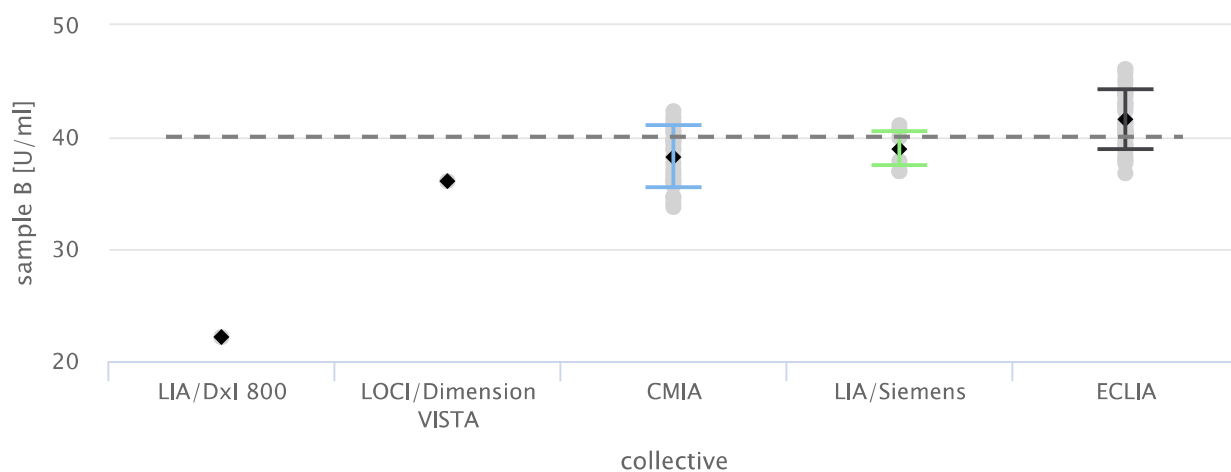
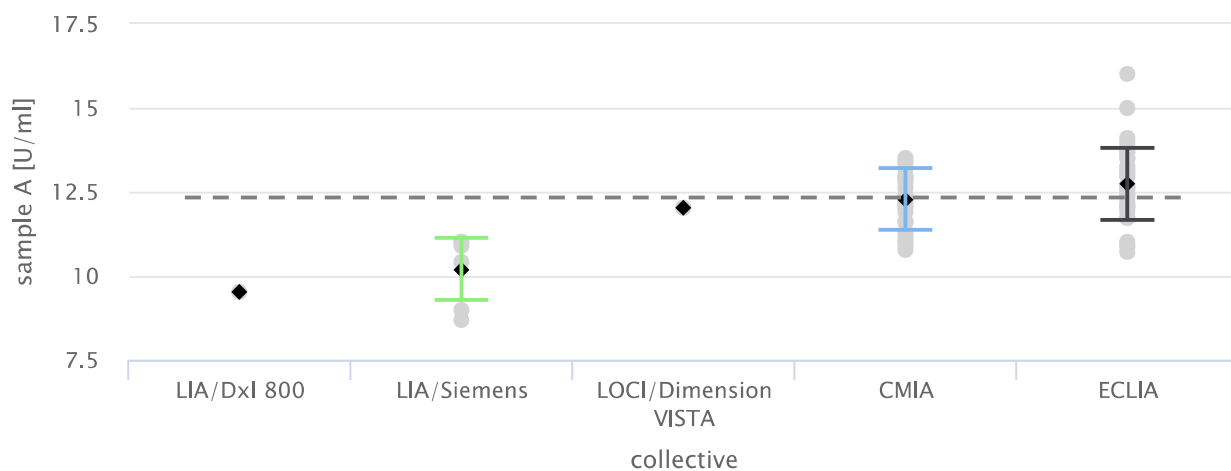


CA 15-3 U/ml

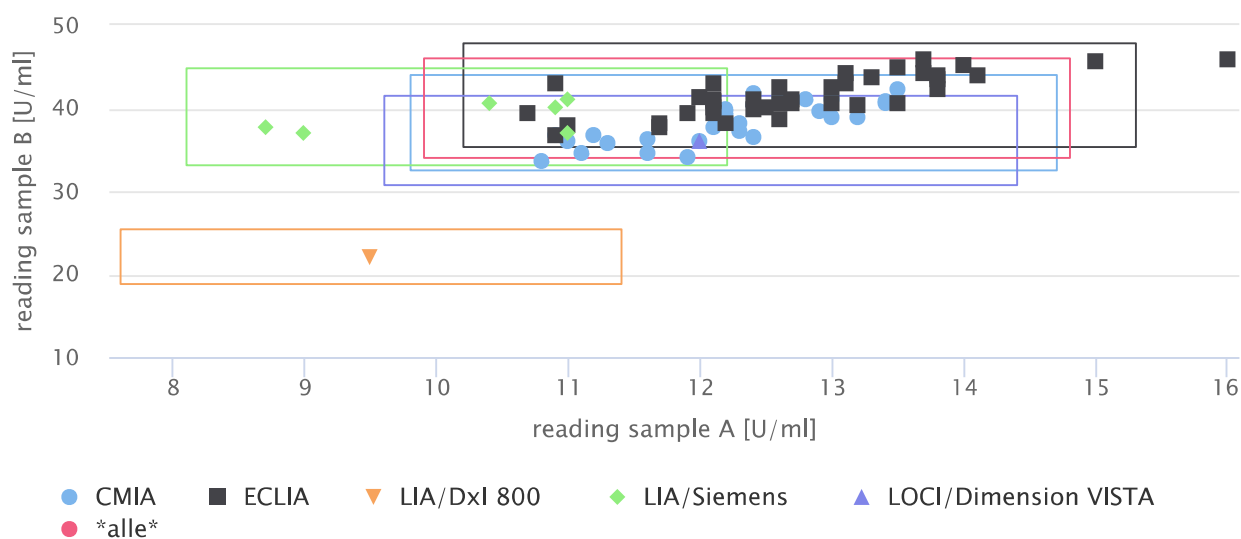
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	75	12.3 [b]	20	[9.9...14.8]	70 (93%)	5 (7%)	12.3	12.4	1.1	9.23
	B	75	40.0 [b]	15	[34.0...46.0]	73 (97%)	2 (3%)	40.0	40.3	3.1	7.82
CMIA	A	28	12.2 [b]	20	[9.8...14.7]	28 (100%)	0 (0%)	12.2	12.3	0.9	7.42
	B	28	38.3 [b]	15	[32.5...44.0]	28 (100%)	0 (0%)	38.3	38.6	2.8	7.22
ECLIA	A	39	12.7 [b]	20	[10.2...15.3]	38 (97%)	1 (3%)	12.7	12.6	1.1	8.36
	B	39	41.6 [b]	15	[35.3...47.8]	39 (100%)	0 (0%)	41.6	41.1	2.7	6.45
LIA/Dxl 800	A	1	9.5 [b]*	20*	[7.6...11.4]*	1 (100%)*	0 (0%)*	9.5*	9.5*	-*	-*
	B	1	22.1 [b]*	15*	[18.8...25.4]*	1 (100%)*	0 (0%)*	22.1*	22.1*	-*	-*
LIA/Siemens	A	6	10.2 [b]	20	[8.1...12.2]	6 (100%)	0 (0%)	10.2	10.7	0.9	9.01
	B	6	38.9 [b]	15	[33.1...44.8]	6 (100%)	0 (0%)	38.9	38.9	1.6	4.09
LOCI/Dimension VISTA	A	1	12.0 [b]*	20*	[9.6...14.4]*	1 (100%)*	0 (0%)*	12.0*	12.0*	-*	-*
	B	1	36.1 [b]*	15*	[30.7...41.5]*	1 (100%)*	0 (0%)*	36.1*	36.1*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

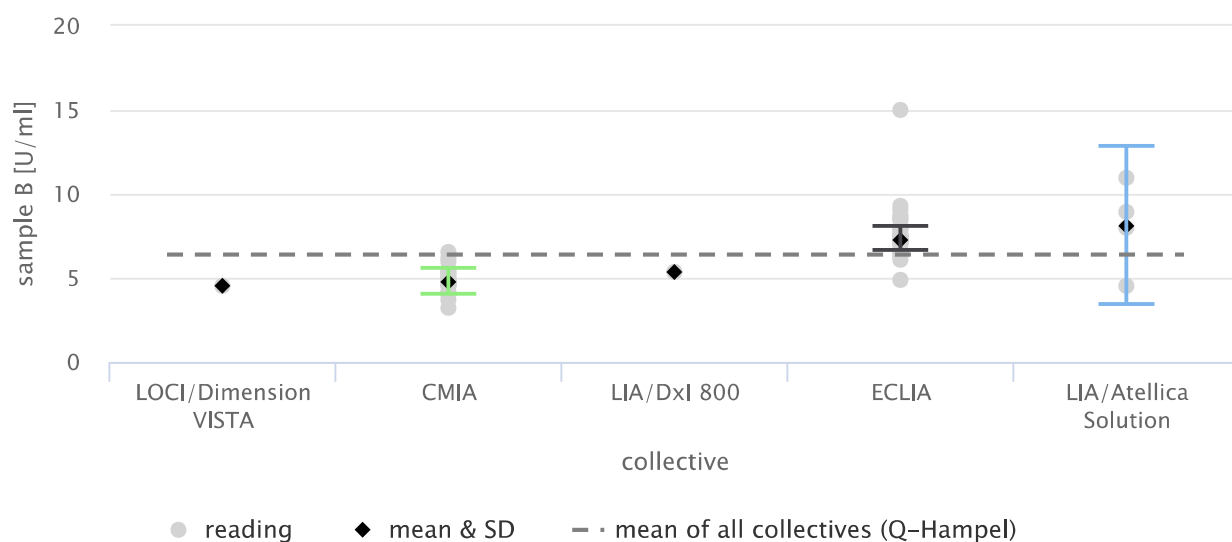
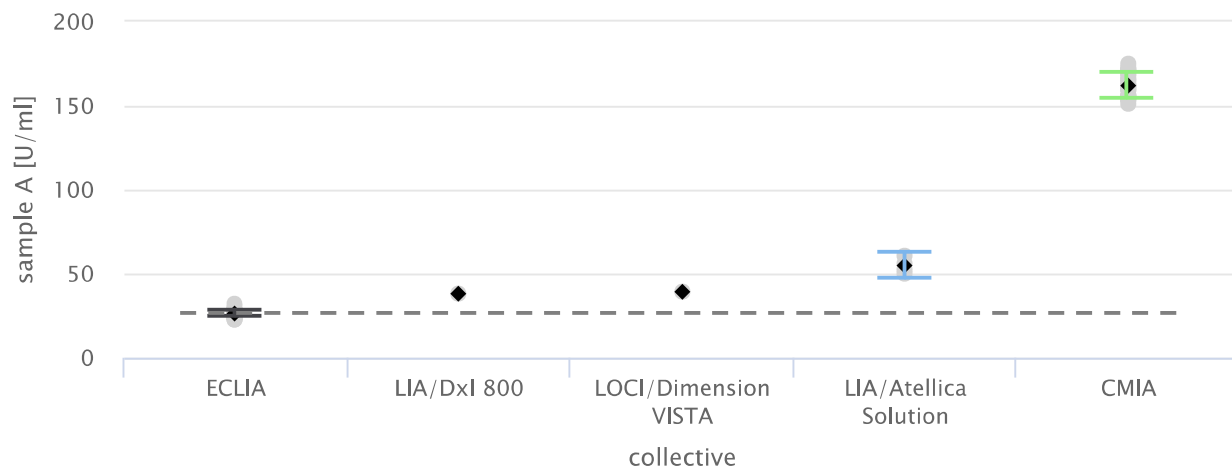


CA 19-9 U/ml

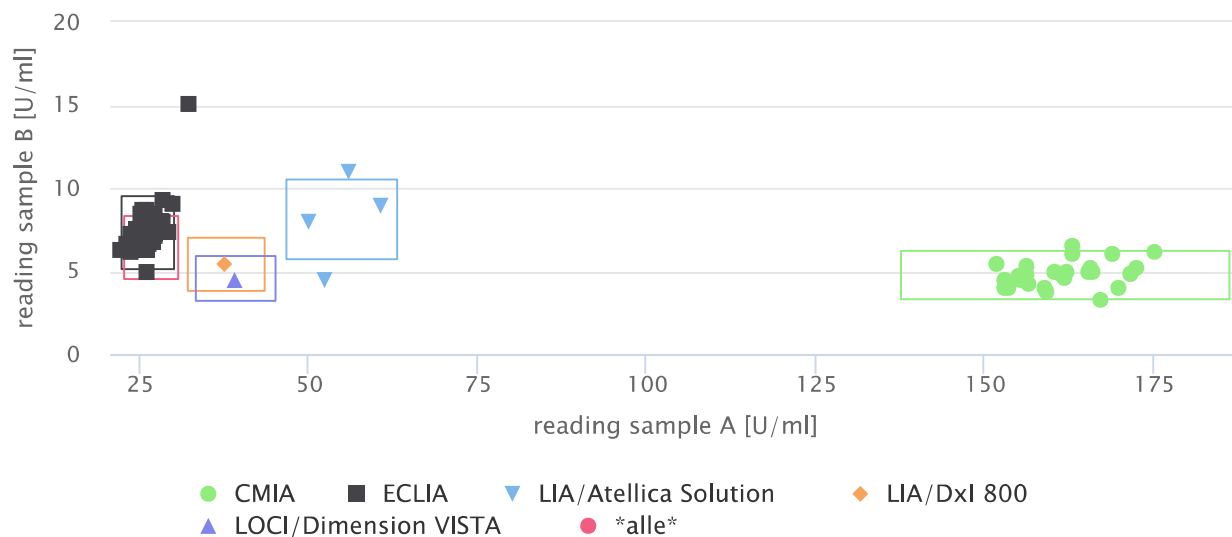
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	81	26.6 [b]	15	[22.6...30.6]	45 (56%)	36 (44%)	26.6	27.9	5.6	20.92
	B	81	6.4 [b]	30	[4.5...8.3]	64 (79%)	17 (21%)	6.4	6.6	1.5	24.06
CMIA	A	28	161.8 [b]	15	[137.5...186.1]	28 (100%)	0 (0%)	161.8	161.7	7.3	4.54
	B	28	4.8 [b]	30	[3.3...6.2]	26 (93%)	2 (7%)	4.8	4.8	0.8	16.31
ECLIA	A	47	26.1 [b]	15	[22.2...30.0]	46 (98%)	1 (2%)	26.1	26.2	1.7	6.61
	B	47	7.3 [b]	30	[5.1...9.5]	45 (96%)	2 (4%)	7.3	7.3	0.7	10.10
LIA/Atellica Solution	A	4	54.8 [b]*	15*	[46.6...63.0]*	4 (100%)*	0 (0%)*	54.8*	54.2*	7.8*	14.17*
	B	4	8.1 [b]*	30*	[5.7...10.5]*	2 (50%)*	2 (50%)*	8.1*	8.4*	4.7*	57.53*
LIA/Dxl 800	A	1	37.7 [b]*	15*	[32.0...43.4]*	1 (100%)*	0 (0%)*	37.7*	37.7*	-*	-*
	B	1	5.4 [b]*	30*	[3.8...7.0]*	1 (100%)*	0 (0%)*	5.4*	5.4*	-*	-*
LOCI/Dimension VISTA	A	1	39.1 [b]*	15*	[33.2...45.0]*	1 (100%)*	0 (0%)*	39.1*	39.1*	-*	-*
	B	1	4.5 [b]*	30*	[3.2...5.9]*	1 (100%)*	0 (0%)*	4.5*	4.5*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

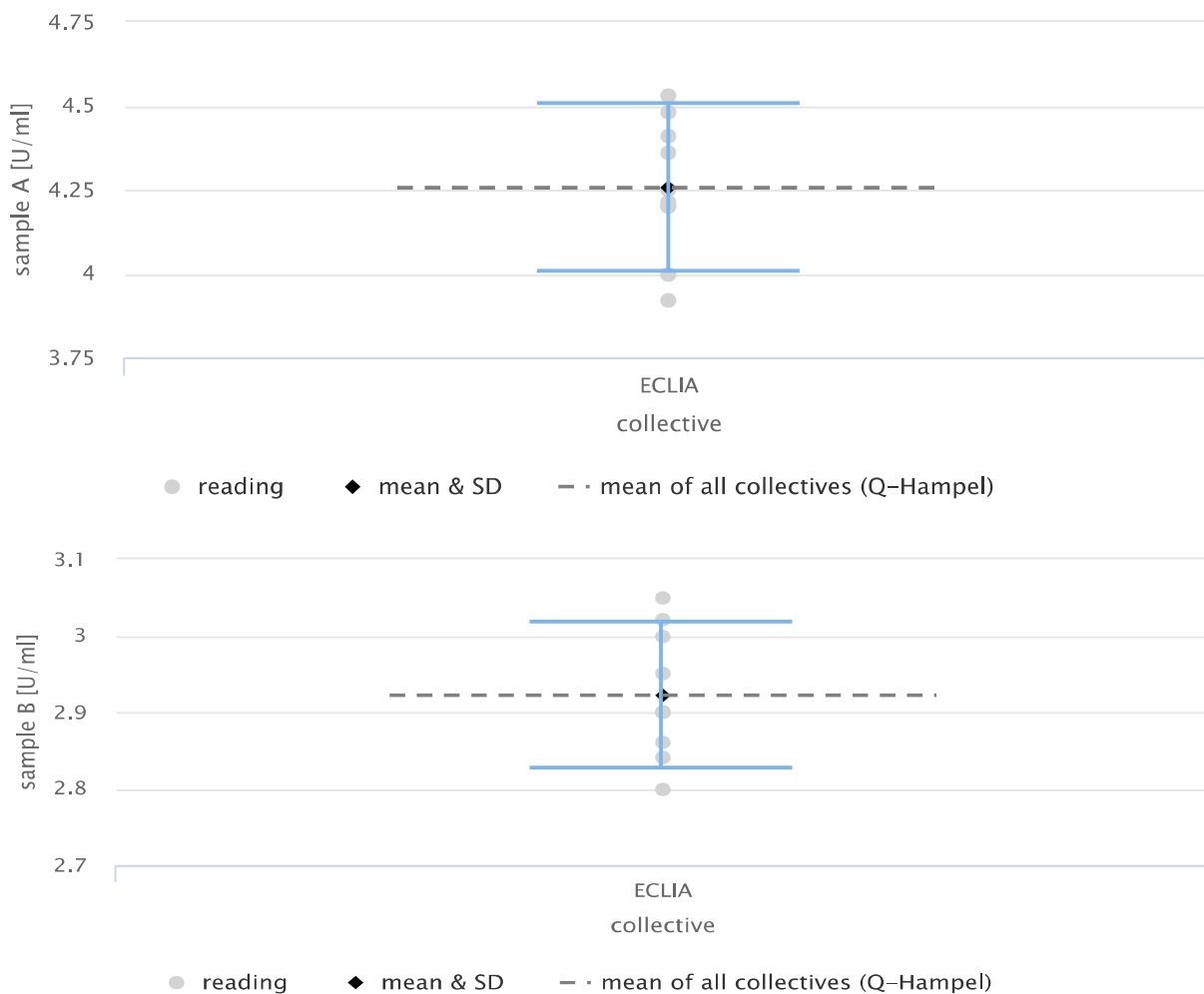


CA 72-4 U/ml

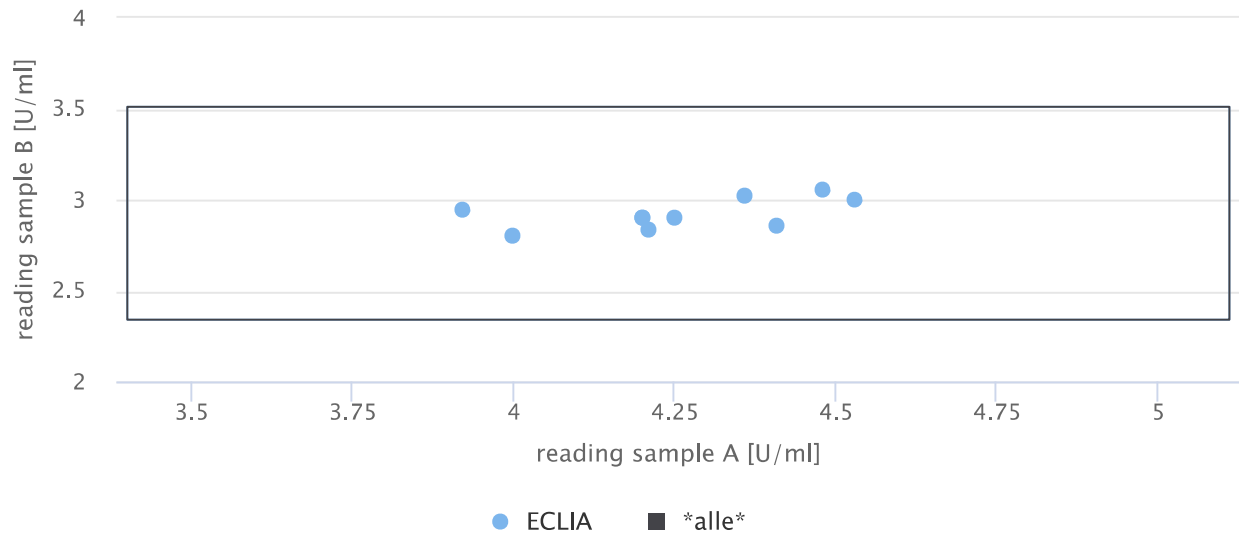
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
ECLIA	A	10	4.26 [b]	20	[3.40...5.11]	¹⁰ (100%)	0 (0%)	4.26	4.23	0.25	5.85
	B	10	2.92 [b]	20	[2.34...3.51]	¹⁰ (100%)	0 (0%)	2.92	2.90	0.10	3.28

S-Curves of all samples



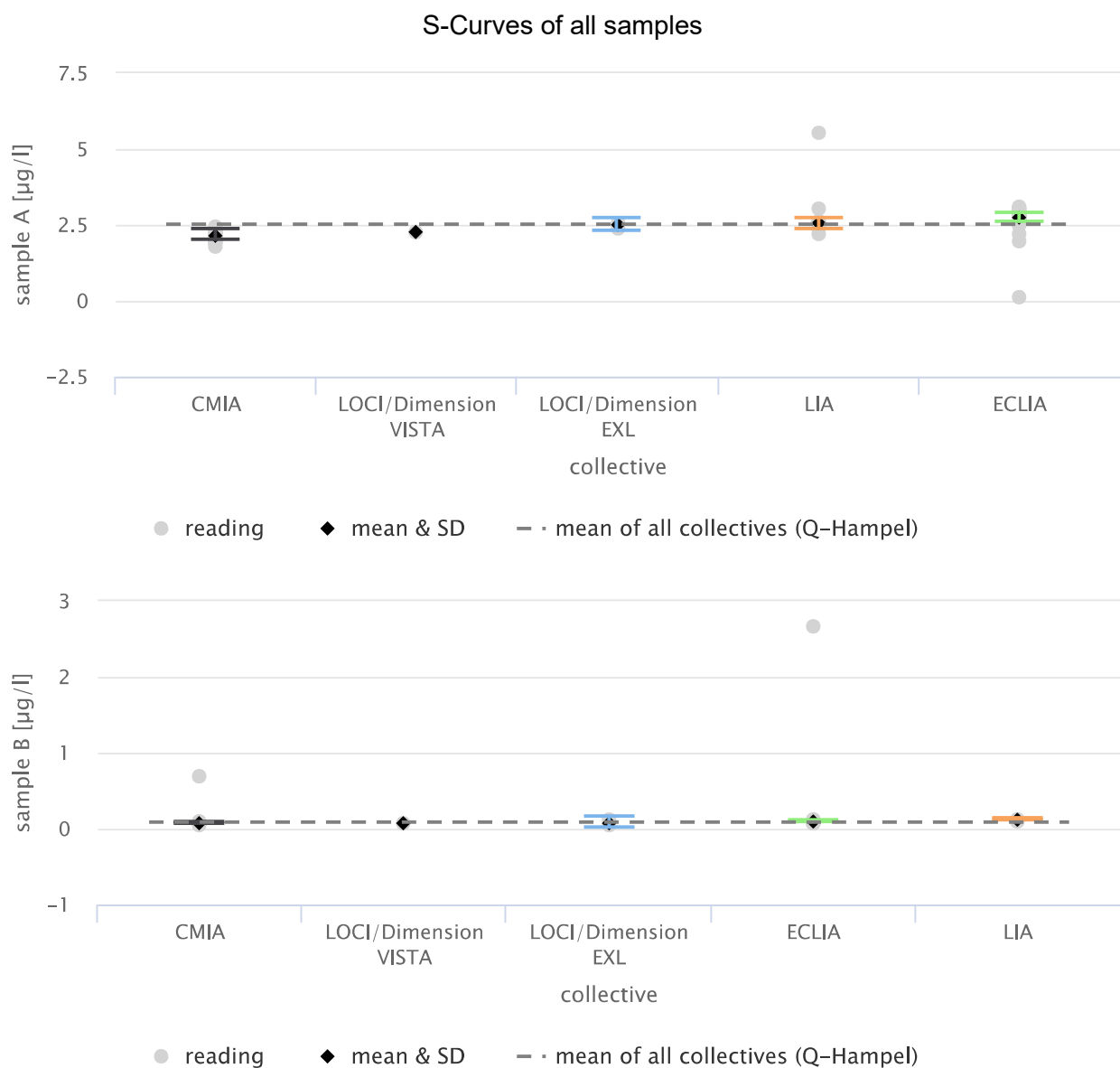
Youden-Plots of all sample pairs



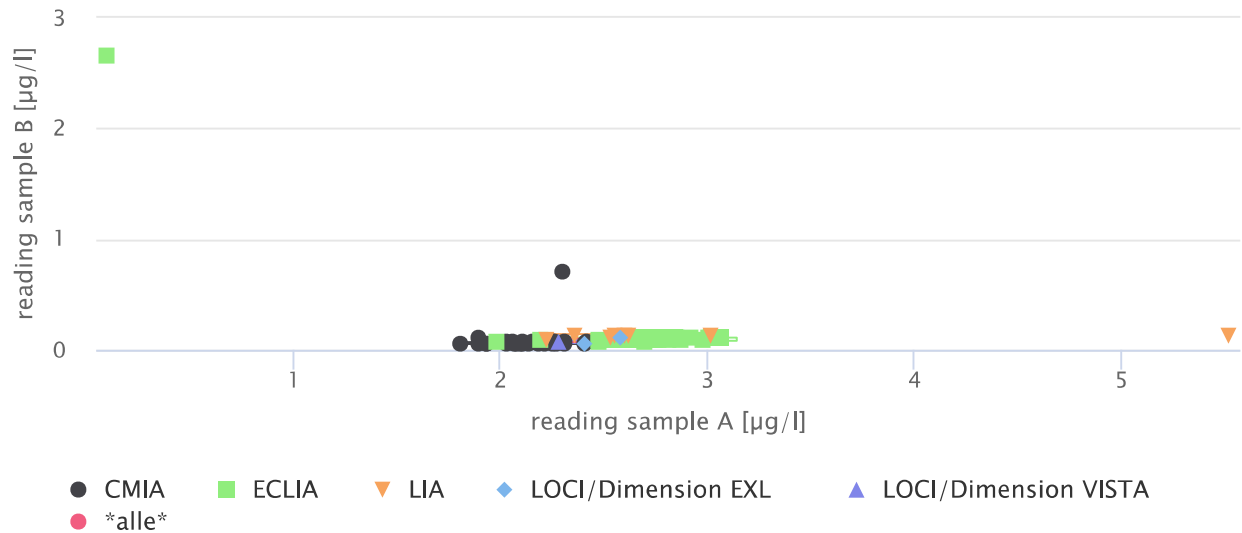
PSA µg/l

Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	94	2.52 [b]	15	[2.14...2.90]	70 (74%)	24 (26%)	2.52	2.60	0.31	12.28
	B	94	0.09 [b]	15	[0.07...0.10]	63 (67%)	31 (33%)	0.09	0.09	0.02	23.64
CMIA	A	29	2.15 [b]	15	[1.83...2.48]	28 (97%)	1 (3%)	2.15	2.16	0.17	7.92
	B	29	0.06 [b]	15	[0.05...0.07]	27 (93%)	2 (7%)	0.06	0.06	0.01	13.13
ECLIA	A	53	2.73 [b]	15	[2.32...3.14]	50 (94%)	3 (6%)	2.73	2.70	0.15	5.31
	B	53	0.10 [b]	15	[0.08...0.11]	52 (98%)	1 (2%)	0.10	0.10	0.01	8.83
LIA	A	9	2.54 [b]	15	[2.16...2.92]	7 (78%)	2 (22%)	2.54	2.58	0.18	7.28
	B	9	0.12 [b]	15	[0.10...0.14]	8 (89%)	1 (11%)	0.12	0.12	0.01	11.73
LOC/Dimension EXL	A	2	2.50 [b]*	15*	[2.12...2.87]*	2 (100%)*	0 (0%)*	2.50*	2.50*	0.19*	7.56*
	B	2	0.08 [b]*	15*	[0.07...0.09]*	0 (0%)*	2 (100%)*	0.08*	0.08*	0.07*	83.22*
LOC/Dimension VISTA	A	1	2.28 [b]*	15*	[1.94...2.62]*	1 (100%)*	0 (0%)*	2.28*	2.28*	-*	-*
	B	1	0.07 [b]*	15*	[0.06...0.08]*	1 (100%)*	0 (0%)*	0.07*	0.07*	-*	-*



Youden-Plots of all sample pairs

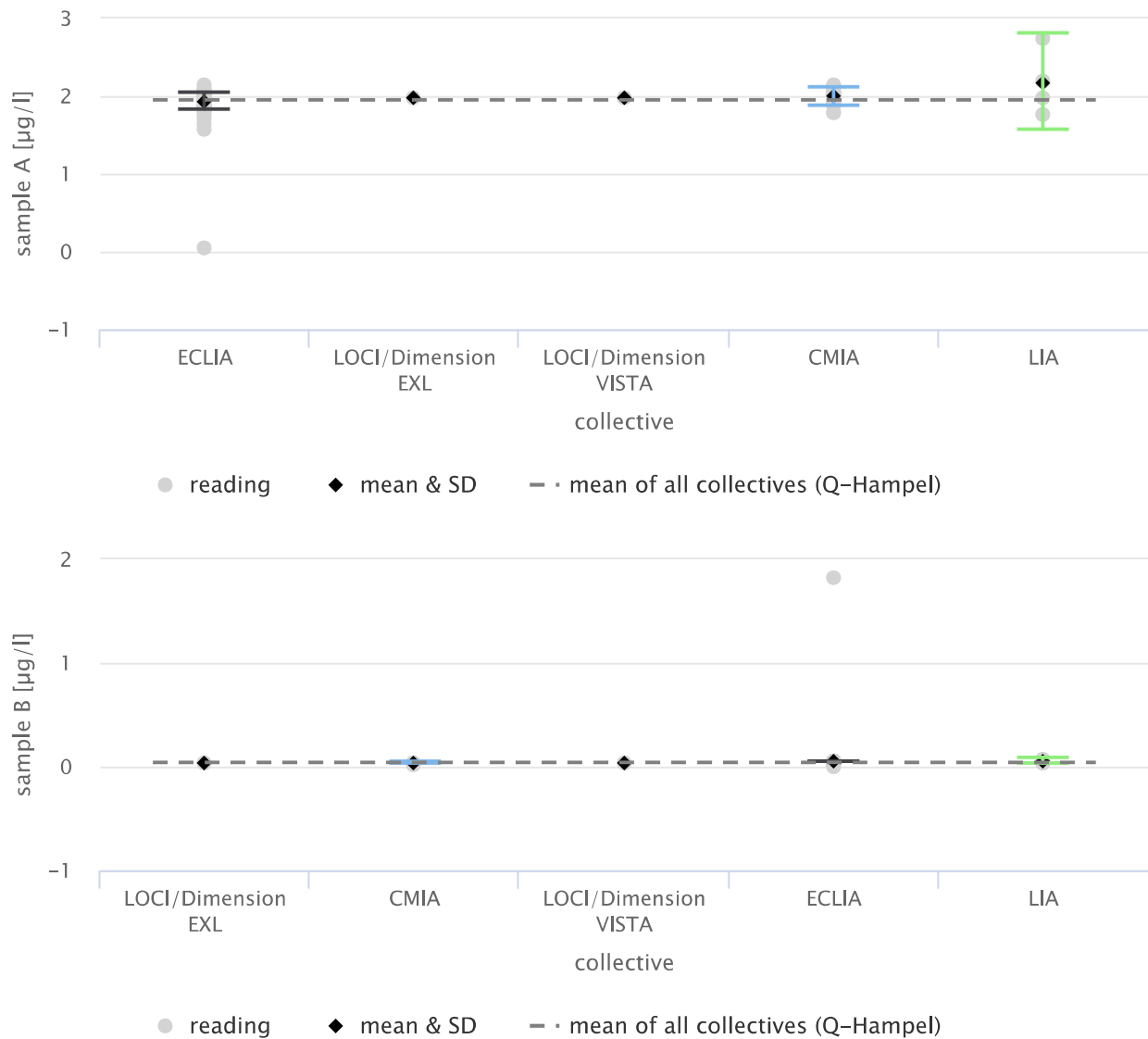


PSA free µg/l

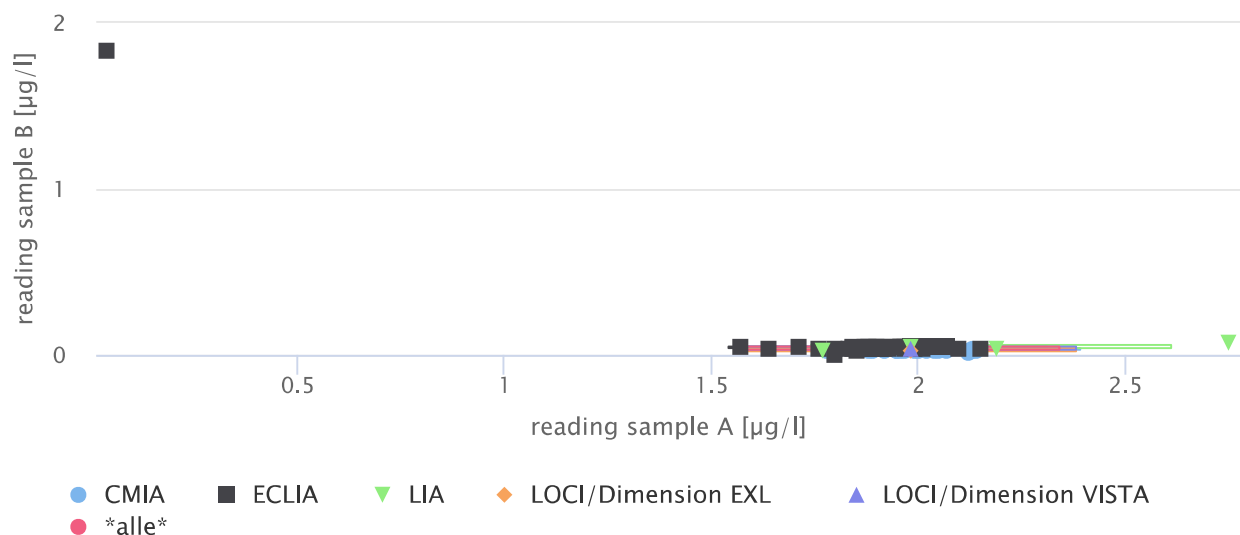
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	77	1.95 [b]	20	[1.56...2.34]	75 (97%)	2 (3%)	1.95	1.96	0.11	5.80
	B	77	0.04 [b]	20	[0.03...0.05]	73 (95%)	4 (5%)	0.04	0.04	0.01	26.64
CMIA	A	25	1.99 [b]	20	[1.59...2.39]	25 (100%)	0 (0%)	1.99	1.99	0.11	5.52
	B	25	0.03 [b]	20	[0.03...0.04]	24 (96%)	1 (4%)	0.03	0.03	0.01	18.77
ECLIA	A	46	1.93 [b]	20	[1.54...2.31]	45 (98%)	1 (2%)	1.93	1.92	0.11	5.53
	B	46	0.05 [b]	20	[0.04...0.05]	43 (93%)	3 (7%)	0.05	0.05	0.01	16.83
LIA	A	4	2.17 [b]*	20*	[1.74...2.61]*	3 (75%)*	1 (25%)*	2.17*	2.08*	0.62*	28.60*
	B	4	0.05 [b]*	20*	[0.04...0.06]*	2 (50%)*	2 (50%)*	0.05*	0.04*	0.03*	58.40*
LOCI/Dimension EXL	A	1	1.98 [b]*	20*	[1.58...2.38]*	1 (100%)*	0 (0%)*	1.98*	1.98*	-*	-*
	B	1	0.03 [b]*	20*	[0.02...0.04]*	1 (100%)*	0 (0%)*	0.03*	0.03*	-*	-*
LOCI/Dimension VISTA	A	1	1.98 [b]*	20*	[1.58...2.38]*	1 (100%)*	0 (0%)*	1.98*	1.98*	-*	-*
	B	1	0.04 [b]*	20*	[0.03...0.05]*	1 (100%)*	0 (0%)*	0.04*	0.04*	-*	-*

S-Curves of all samples



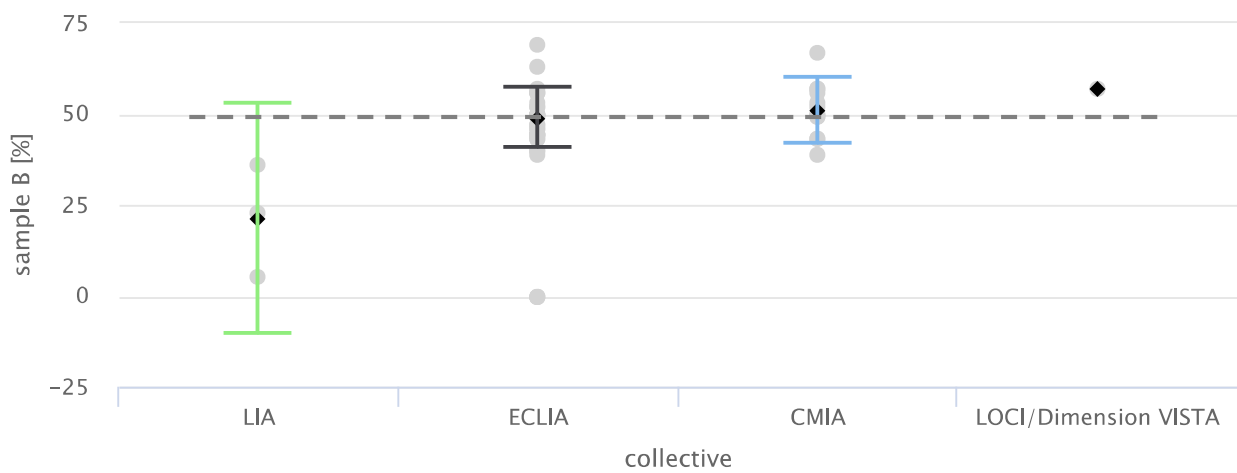
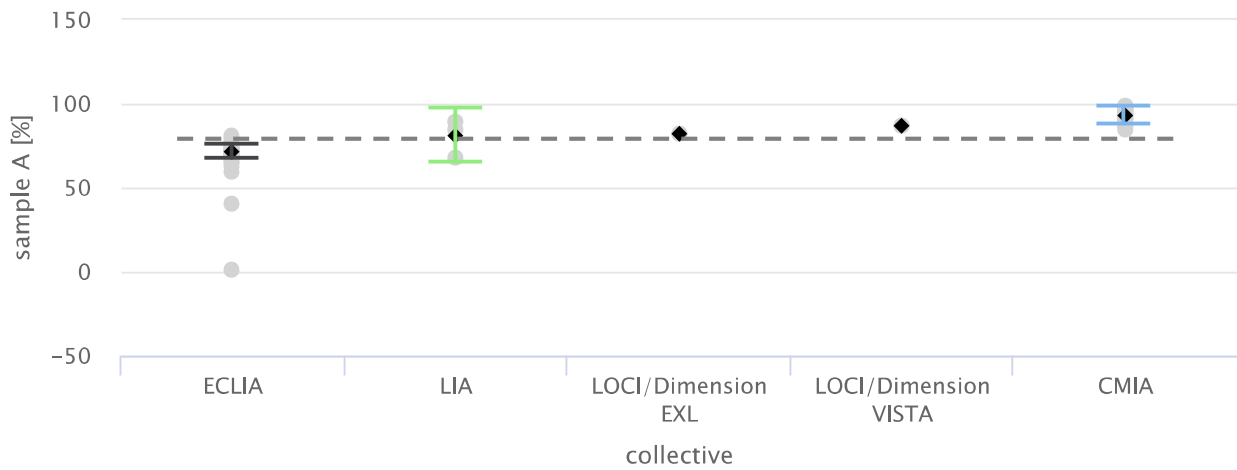
Youden-Plots of all sample pairs



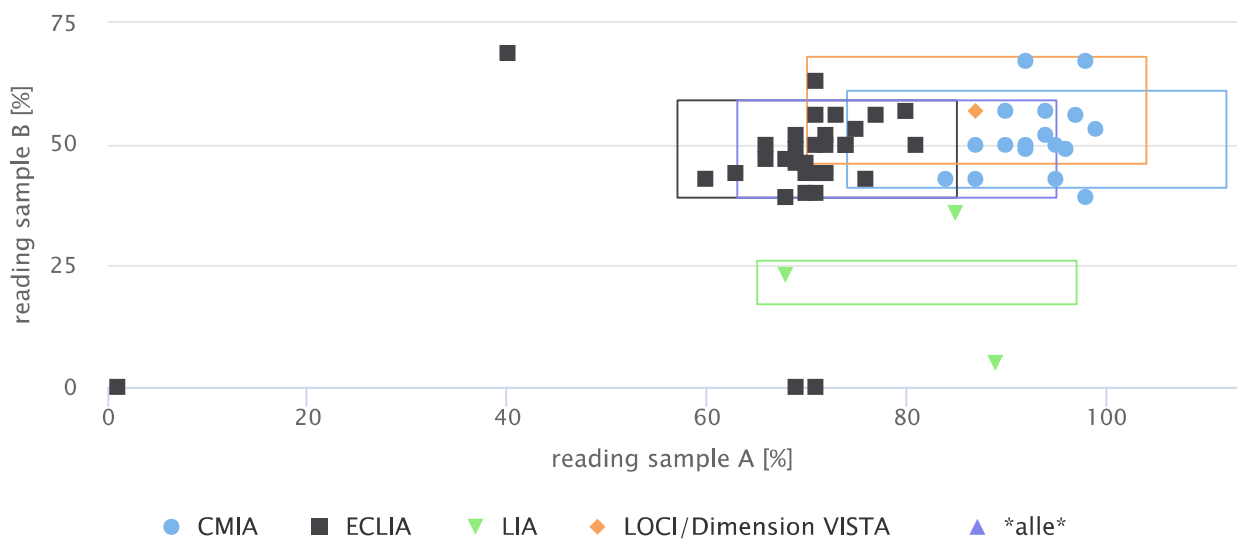
Quotient free PSA/total PSA %

Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	57	79 [b]	20	[63...95]	⁴⁸ (84%)	9 (16%)	79	74	10	12.63
	B	55	49 [b]	20	[39...59]	⁴⁵ (82%)	10 (18%)	49	49	9	18.87
CMIA	A	19	93 [b]	20	[74...112]	¹⁹ (100%)	0 (0%)	93	94	5	5.27
	B	18	51 [b]	20	[41...61]	¹⁵ (83%)	3 (17%)	51	50	9	17.90
ECLIA	A	33	71 [b]	20	[57...85]	³¹ (94%)	2 (6%)	71	71	4	6.00
	B	33	49 [b]	20	[39...59]	²⁸ (85%)	5 (15%)	49	47	8	16.57
LIA	A	3	81 [b]*	20*	[65...97]*	³ (100%)*	0 (0%)*	81*	85*	16*	19.94*
	B	3	21 [b]*	20*	[17...26]*	¹ (33%)*	2 (67%)*	21*	23*	32*	148.23*
LOCI/Dimension EXL	A	1	82 [b]*	20*	[66...98]*	¹ (100%)*	0 (0%)*	82*	82*	-*	-*
LOCI/Dimension VISTA	A	1	87 [b]*	20*	[70...104]*	¹ (100%)*	0 (0%)*	87*	87*	-*	-*
	B	1	57 [b]*	20*	[46...68]*	¹ (100%)*	0 (0%)*	57*	57*	-*	-*

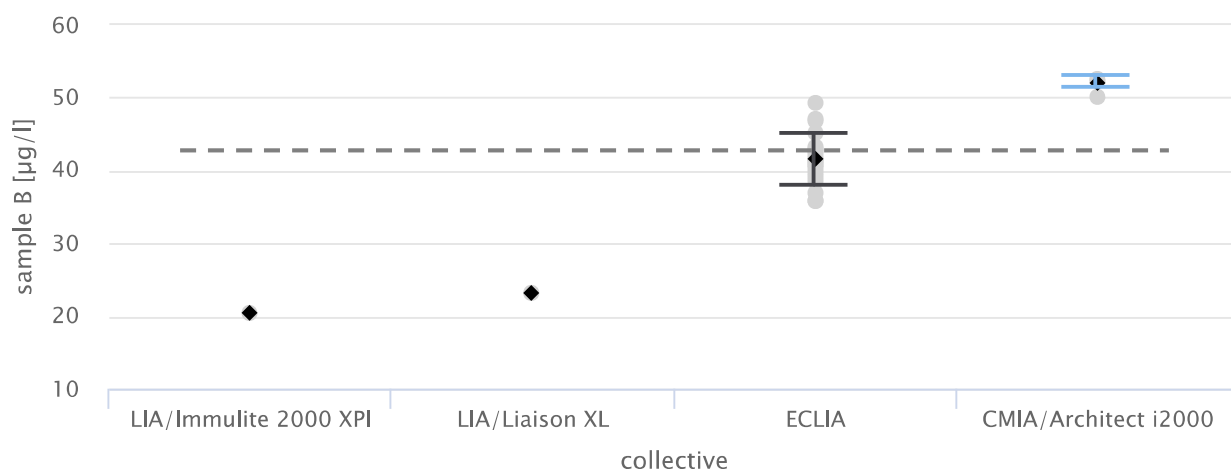
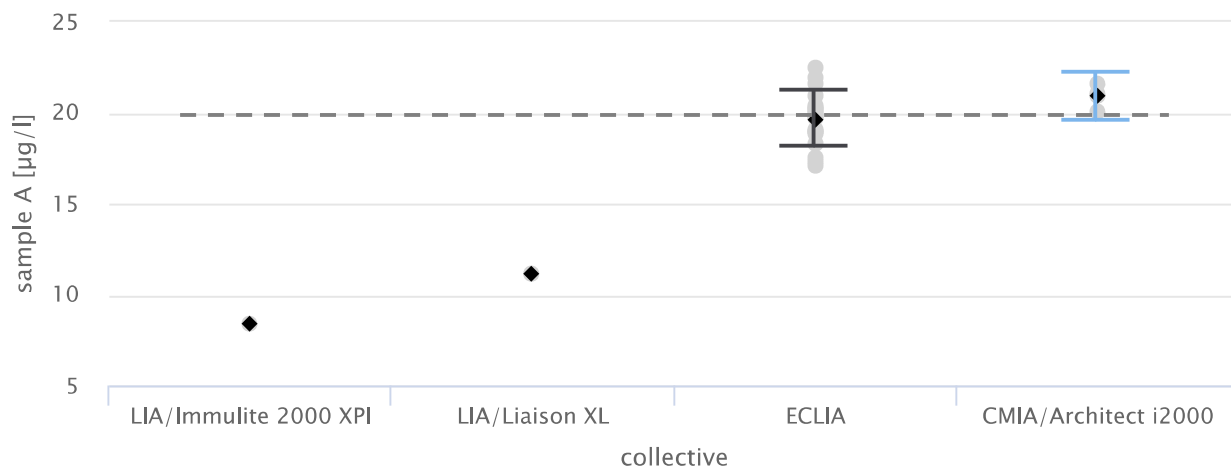


Youden-Plots of all sample pairs

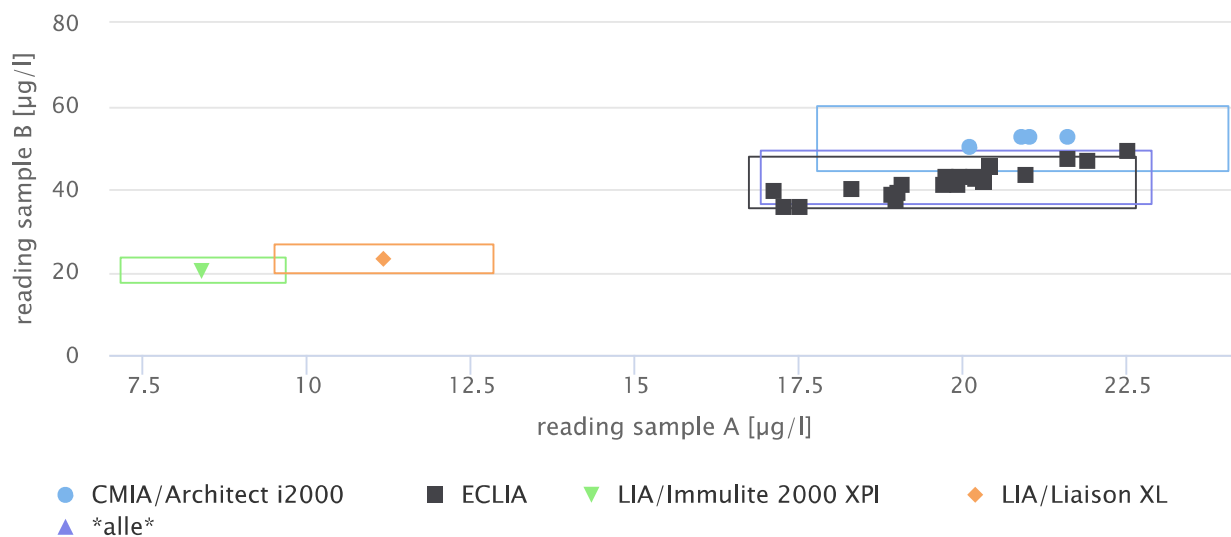


Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
all	A	27	19.88 [b]	15	[16.90...22.86]	25 (93%)	2 (7%)	19.88	19.90	1.74	8.76
	B	27	42.78 [b]	15	[36.36...49.19]	18 (67%)	9 (33%)	42.78	41.70	5.55	12.98
CMIA/Architect i2000	A	4	20.90 [b]*	15*	[17.76...24.03]*	4 (100%)*	0 (0%)*	20.90*	20.95*	1.33*	6.37*
	B	4	52.12 [b]*	15*	[44.30...59.94]*	4 (100%)*	0 (0%)*	52.12*	52.50*	0.82*	1.57*
ECLIA	A	21	19.67 [b]	15	[16.72...22.62]	21 (100%)	0 (0%)	19.67	19.80	1.50	7.64
	B	21	41.54 [b]	15	[35.31...47.77]	20 (95%)	1 (5%)	41.54	41.30	3.57	8.60
LIA/Immulite 2000 XPI	A	1	8.40 [b]*	15*	[7.14...9.66]*	1 (100%)*	0 (0%)*	8.40*	8.40*	-*	-*
	B	1	20.40 [b]*	15*	[17.34...23.46]*	1 (100%)*	0 (0%)*	20.40*	20.40*	-*	-*
LIA/Liaison XL	A	1	11.16 [b]*	15*	[9.49...12.83]*	1 (100%)*	0 (0%)*	11.16*	11.16*	-*	-*
	B	1	23.17 [b]*	15*	[19.69...26.65]*	1 (100%)*	0 (0%)*	23.17*	23.17*	-*	-*

S-Curves of all samples



Youden-Plots of all sample pairs

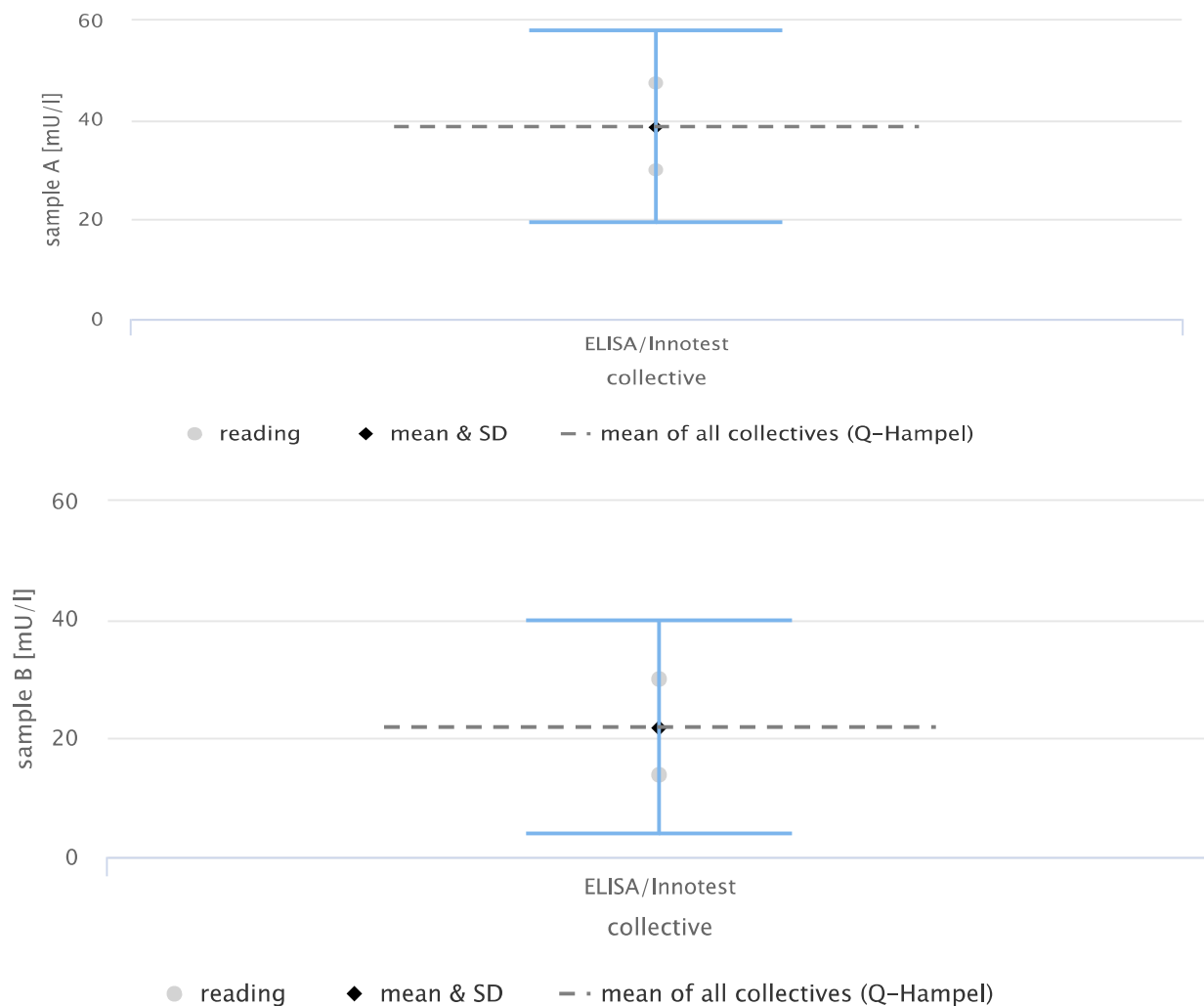


human placental alkaline phosphatase mU/l

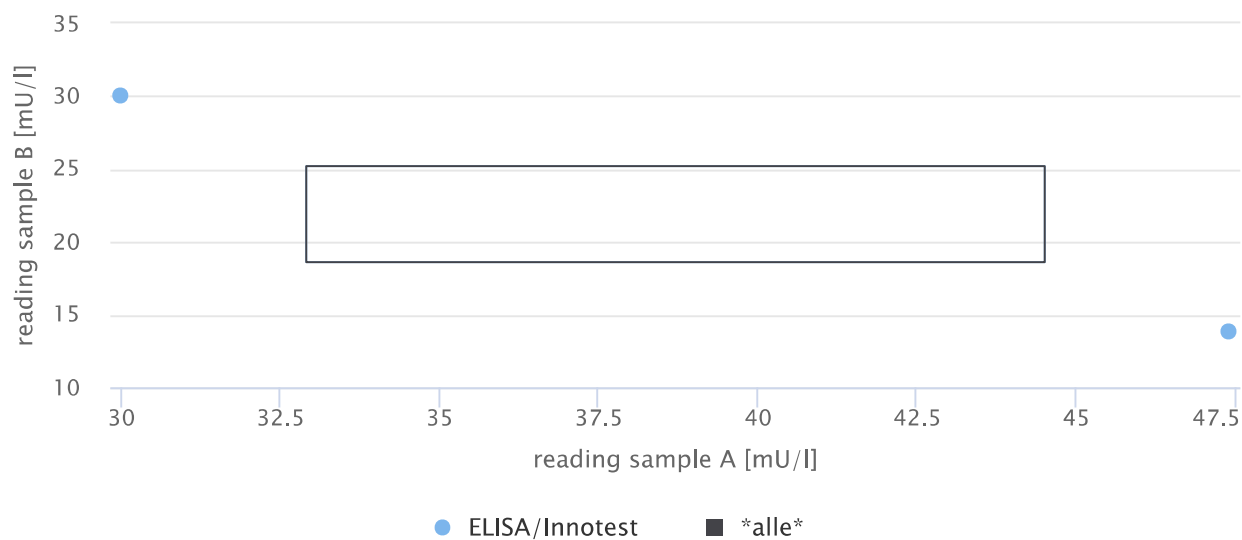
Split: Methode

Collective	Sample	AnzE	Target	%-Abw	limits	correct	outliers	MW	Median	SD	CV %
ELISA/Innotest	A	2	38.7 [b]*	15*	[32.9...44.5]*	0 (0%)*	2 (100%)*	38.7*	38.7*	19.3*	49.89*
	B	2	21.9 [b]*	15*	[18.6...25.2]*	0 (0%)*	2 (100%)*	21.9*	21.9*	18.0*	82.08*

S-Curves of all samples



Youden-Plots of all sample pairs



Category (Collectives)

CEA µg/l

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601 ECLIA/Modular
3	ELFA	Method	ELFA
4	LIA	Method	LIA/Atellica Solution LIA/Centaur XP LIA/Dxl 800
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

AFP µg/l

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601
3	LIA/Atellica Solution	Method	LIA/Atellica Solution
4	LIA/Dxl 800	Method	LIA/Dxl 800
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

CYFRA (21-1) µg/l

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411

hCGβ mIU/ml

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA stat/Architect i1000 CMIA stat/Architect i2000 CMIA/Alinity CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601 ECLIA/Cobas pro ECLIA/Modular
3	LIA/Atellica Solution	Method	LIA/Atellica Solution
4	LIA/Dxl 800	Method	LIA/Dxl 800
5	LOCI/Dimension EXL	Method	LOCI/Dimension EXL
6	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

NSE µg/l

Number	Collective	Attribute	Specification
1	CMIA/Alinity	Method	CMIA/Alinity
2	ECLIA	Method	ECLIA-2010 ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411
3	LIA/Liaison XL	Method	LIA/Liaison XL

S - 100 µg/l

Number	Collective	Attribute	Specification
1	ECLIA	Method	ECLIA-2010 ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411
2	LIA/Liaison XL	Method	LIA/Liaison XL

SCC ng/ml

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411

CA 125 U/ml

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA-2010 ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601
3	LIA/Atellica Solution	Method	LIA/Atellica Solution
4	LIA/Dxl 800	Method	LIA/Dxl 800
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

CA 15-3 U/ml

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601 ECLIA/Modular
3	LIA/Dxl 800	Method	LIA/Dxl 800
4	LIA/Siemens	Method	LIA/Atellica Solution LIA/Centaur XP
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

CA 19-9 U/ml

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA-2010 ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601
3	LIA/Atellica Solution	Method	LIA/Atellica Solution
4	LIA/Dxl 800	Method	LIA/Dxl 800

5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA
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CA 72-4 U/ml

Number	Collective	Attribute	Specification
1	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas pro

PSA µg/l

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i1000 CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601 ECLIA/Modular
3	LIA	Method	LIA/Atellica Solution LIA/Centaur XP LIA/Dxl 800
4	LOCI/Dimension EXL	Method	LOCI/Dimension EXL
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

PSA free µg/l

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601 ECLIA/Modular
3	LIA	Method	LIA/Atellica Solution LIA/Centaur XP LIA/Dxl 800
4	LOCI/Dimension EXL	Method	LOCI/Dimension EXL
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

Quotient free PSA/total PSA %

Number	Collective	Attribute	Specification
1	CMIA	Method	CMIA/Alinity CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000

			ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601
3	LIA	Method	LIA/Atellica Solution LIA/Centaur XP LIA/Dxl 800
4	LOCI/Dimension EXL	Method	LOCI/Dimension EXL
5	LOCI/Dimension VISTA	Method	LOCI/Dimension VISTA

Thyreoglobulin µg/l

Number	Collective	Attribute	Specification
1	CMIA/Architect i2000	Method	CMIA/Architect i2000
2	ECLIA	Method	ECLIA/Cobas 6000 ECLIA/Cobas 8000 ECLIA/Cobas 8000-e801 ECLIA/Cobas e 411 ECLIA/Cobas e 601
3	LIA/Immulite 2000 XPI	Method	LIA/Immulite 2000 XPI
4	LIA/Liaison XL	Method	LIA/Liaison XL

human placental alkaline phosphatase mU/l

Number	Collective	Attribute	Specification
1	ELISA/Innotest	Method	ELISA/Innotest

With best regards

Dr. Christoph Buchta, MBA
Technical Management

Univ. Prof. Dr. Andrea Griesmacher
EQA Scheme Director