Verein für
Association pour le
Associazione per il

medizinische Qualitätskontrolle
contrôle de qualité médical
controllo di qualità medico

Survey Report

2014 - 4

MQ, Institut für Klinische Chemie, Universitätsspital Zürich, 8091 Zürich
Telefon 044/255 34 11, Telefax 044/261 12 83, www.mqzh.ch, info@mqzh.ch

Survey Specimens
The homogeneity and stability of all specimens were checked before and/or during shipment and no irregularities were noted. The suitability tests were performed by the laboratories of the Universitätsspital Zürich (University Hospital Zurich) (http://www.uzl.usz.ch/).
The following survey specimens were produced specifically for MQ by a sub-contractor:
B1 Strep A Test, B2 Uricult, H4 Parasitic Hematology, K14 tumor marker

Determination of target values

For each target value, the type of determination per ISO17043: 2010 B2.1 is indicated (column "type"):
a Value known due to production.
b Certified reference value for use with special specimens
c Reference value determined by analysis
d Consensus values of expert laboratories
e Consensus values of the participants

For methods groups with more than 9 participants, consensus values of the participants ("e") are generally determined. In order to provide all participants with target values that are as meaningful as possible, other methods may also be applied for smaller method groups.

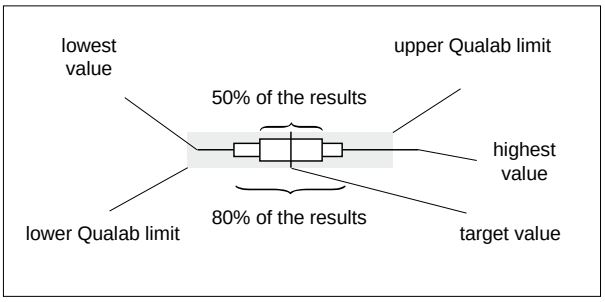
Uncertainty of the determined target values
The standard uncertainty (u_x) is calculated using the following formula (ISO13528):
ux = (target value/100) * (1.25/square root of "number of participants") * %CV

- ux has the same unit as the target value
- ux can be compared with the standard deviation of the participants' collective (SD=target value*%CV/100)
- For participant numbers >18, the standard uncertainty (ux) is significantly lower than the scatter of the collective participants and can be neglected.

QUALAB and MQ tolerances
For all mandatory analyzes, QUALAB tolerances are used (www.qualab.ch, external quality control). For non-mandatory analyzes, the tolerances are specified by MQ's survey specimen leader.

If the determined uncertainty, ux, of the target value is greater than 15% of the QUALAB or MQ tolerance, the letter indicating the type of target detection is marked with an additional star (example "e*"). Thereby, we are alerting the participants to the fact that the uncertainty of the target value can have an impact on the evaluation.

Graphics
The results are shown graphically as follows:



Comparison of Devices
The data in this report allows you to compare the performance of different devices. However, remember to consider the following:

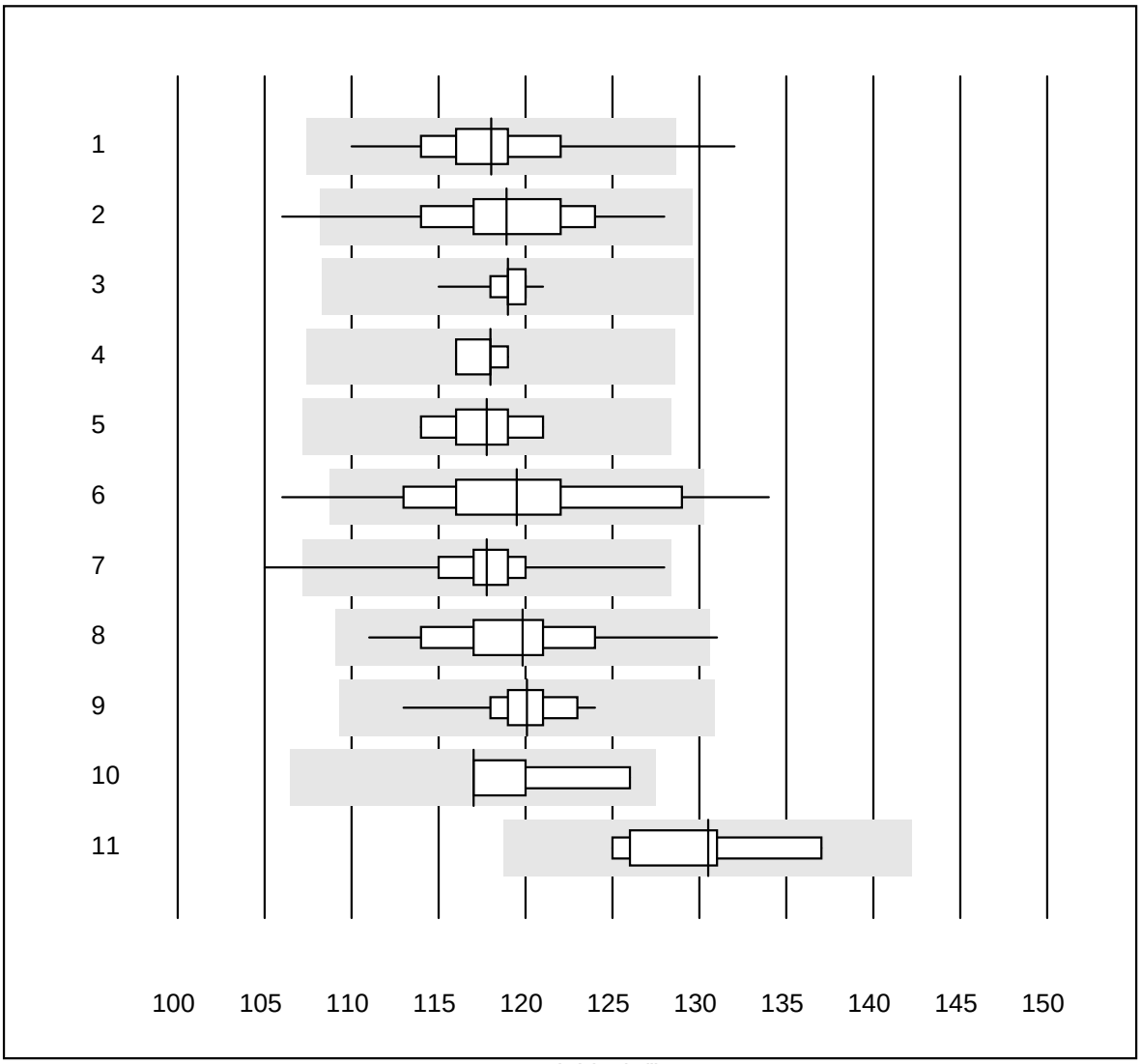
- The chemical control K1 is a ready-to-use commercial control serum. Even if the specimen is of human origin, it is possible that matrix effects occur. These are device-specific and result in different target values.
- Only one specimen was measured. Since the scatter of the results is dependent on the nature of the specimen (matrix effects) and on the signal strength, the determined coefficient of variations (CV in %) cannot be applied generally.
- A large number of runaways is due to administrative errors (wrong unit, results mixed up) or to operator errors (wrong sample, not correctly taken up in solution, not mixed well) and has nothing to do with the type of device.
.

Zürich, 1.12.2014

Dr. R. Fried
Suvey Director

.

Hemoglobin

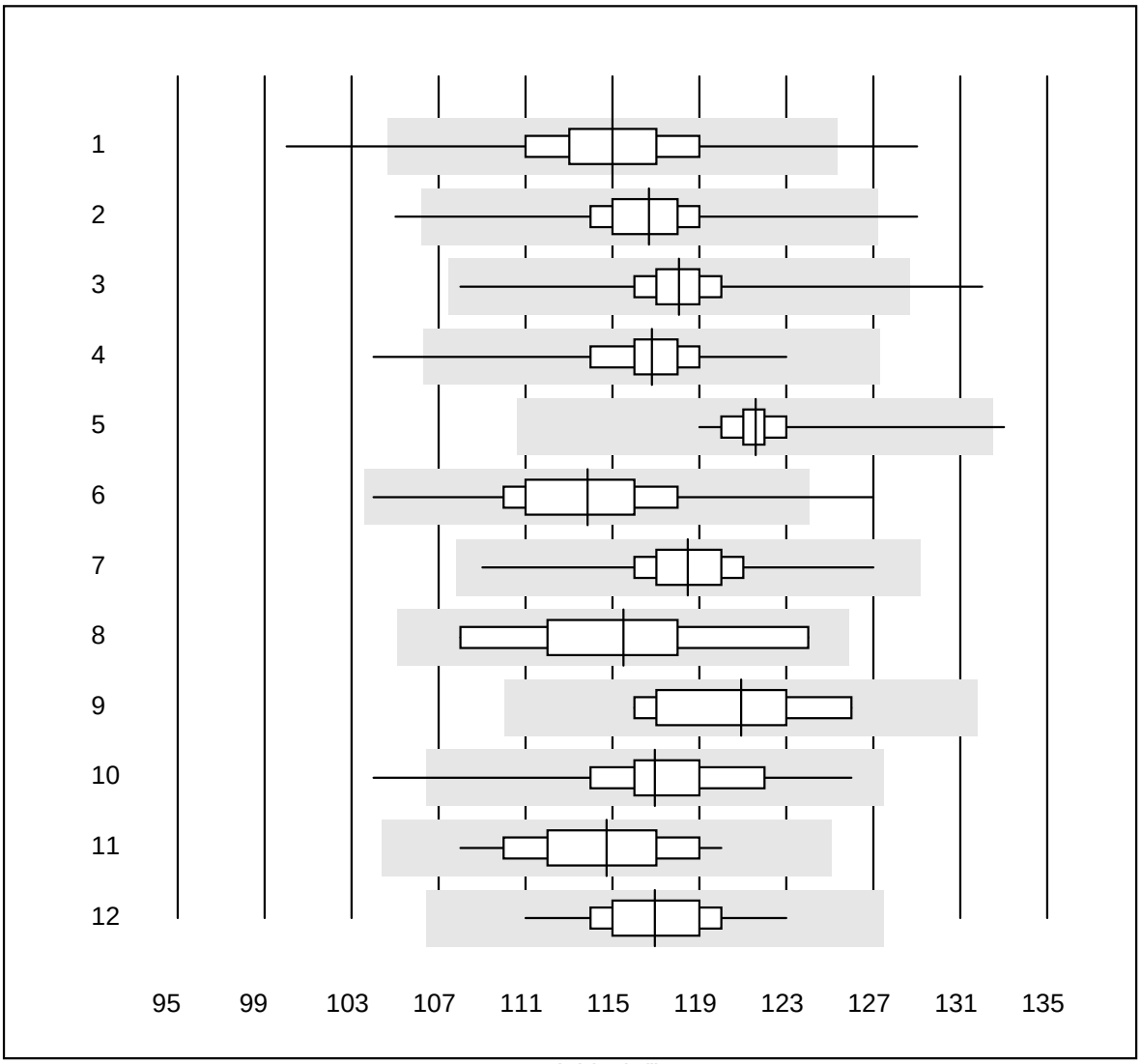


QUALAB tolerance : 9 %

Hemoglobin (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Automat	57	93.0	3.5	3.5	118.0	3.2	e
2	Cyanmethemoglobin	61	91.8	1.6	6.6	118.9	3.5	e
3	Sysmex XT/XE/XS	38	100.0	0.0	0.0	119.0	0.9	e
4	Sysmex K1000	5	80.0	0.0	20.0	118.0	1.1	e
5	ABX Pentra	13	100.0	0.0	0.0	117.8	2.1	e
6	Reflotron	90	83.4	12.2	4.4	119.5	5.0	e
7	Hemocue	324	94.5	0.3	5.2	117.8	2.3	e
8	Dr. Lange	25	92.0	4.0	4.0	119.8	3.7	e
9	Hemocontrol	12	100.0	0.0	0.0	120.1	2.4	e
10	Eurolyser	5	100.0	0.0	0.0	117.0	3.3	e*
11	Other methods	6	83.3	0.0	16.7	130.5	3.7	e*

Hemoglobin

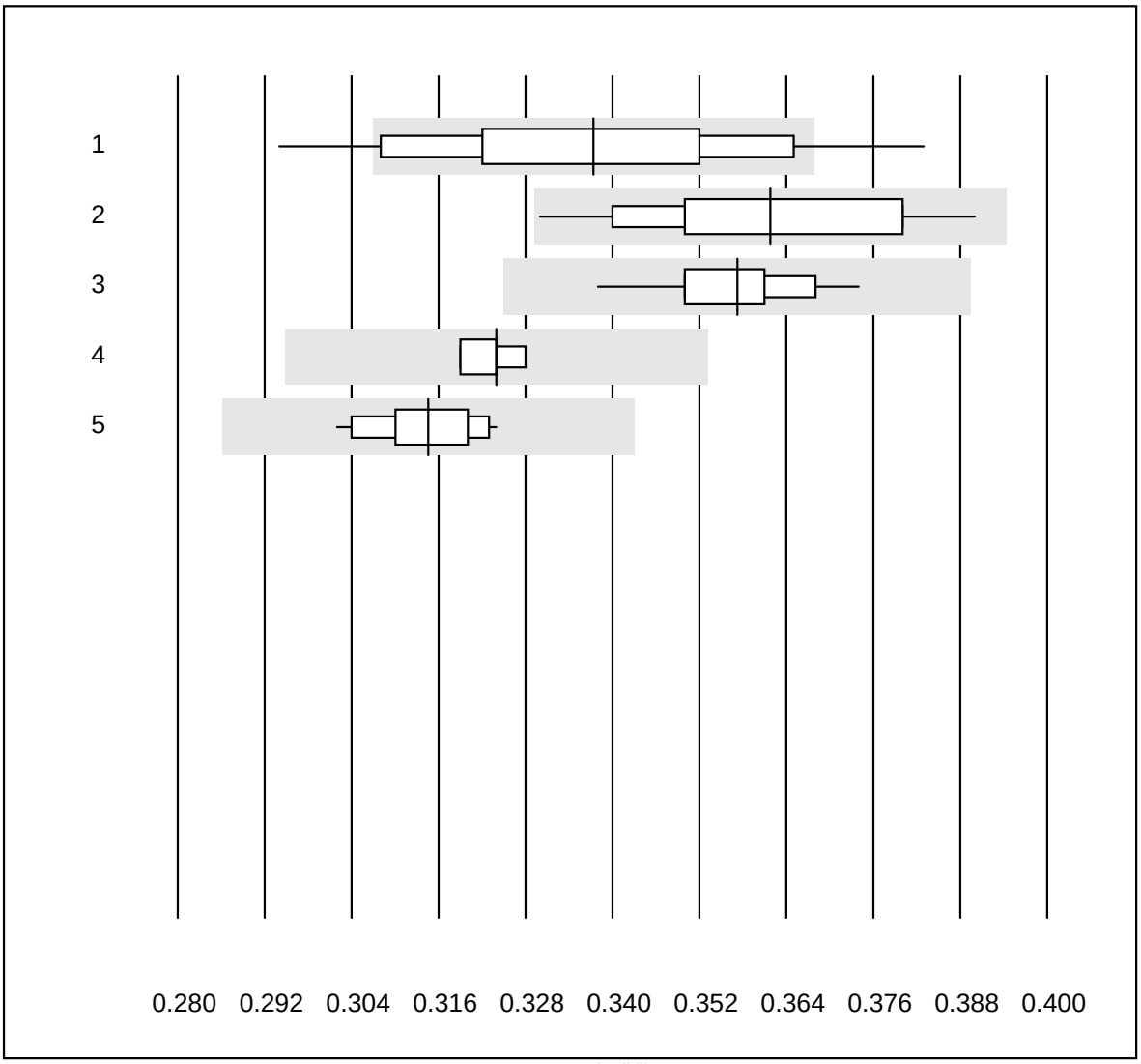


QUALAB tolerance : 9 %

Hemoglobin (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Micros	940	95.1	1.7	3.2	115	3.1	e
2	Microsemi	162	96.9	1.2	1.9	117	2.3	e
3	Sysmex KX21	451	96.9	0.4	2.7	118	1.8	e
4	Sysmex PocH - 100i	206	96.1	1.5	2.4	117	2.3	e
5	Sysmex XP 300	116	94.8	0.9	4.3	122	1.4	e
6	Mythic	246	96.8	0.4	2.8	114	3.3	e
7	Swelab	66	95.5	0.0	4.5	118	2.3	e
8	MS4	8	100.0	0.0	0.0	116	4.3	e*
9	Abacus Junior	12	100.0	0.0	0.0	121	3.1	e
10	Medonic	21	95.2	4.8	0.0	117	4.0	e
11	Nihon Kohden Celltac	28	96.4	0.0	3.6	115	2.9	e
12	Samsung HC10	40	97.5	0.0	2.5	117	2.4	e

Hematocrit

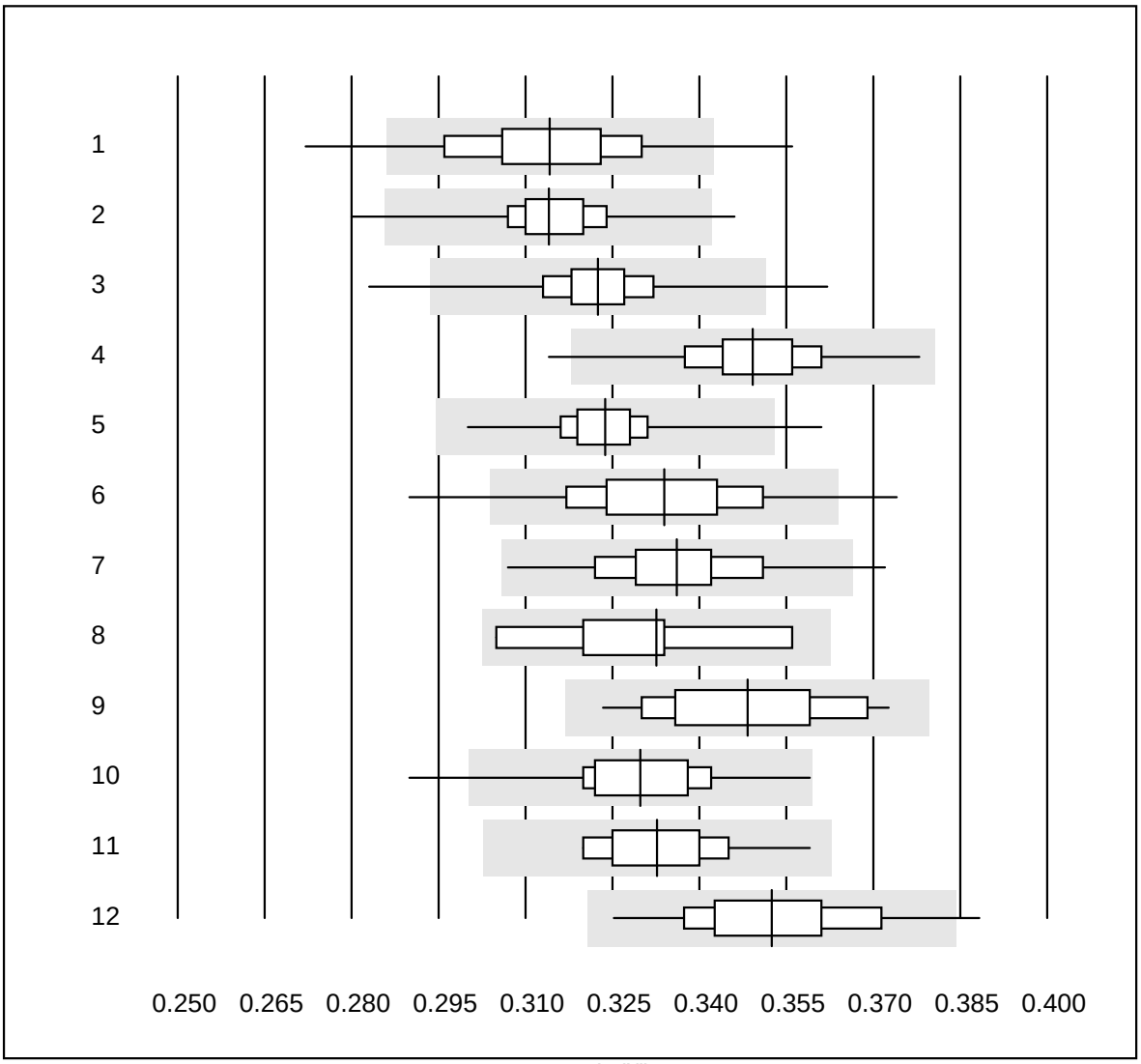


QUALAB tolerance : 9 %

Hematocrit (l/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Automat	49	83.7	16.3	0.0	0.34	6.4	e
2	Centrifuge	18	94.4	0.0	5.6	0.36	4.9	e*
3	Sysmex XT/XE/XS	37	100.0	0.0	0.0	0.36	2.2	e
4	Sysmex K1000	5	80.0	0.0	20.0	0.32	1.1	e
5	ABX Pentra	13	100.0	0.0	0.0	0.31	2.4	e

Hematocrit

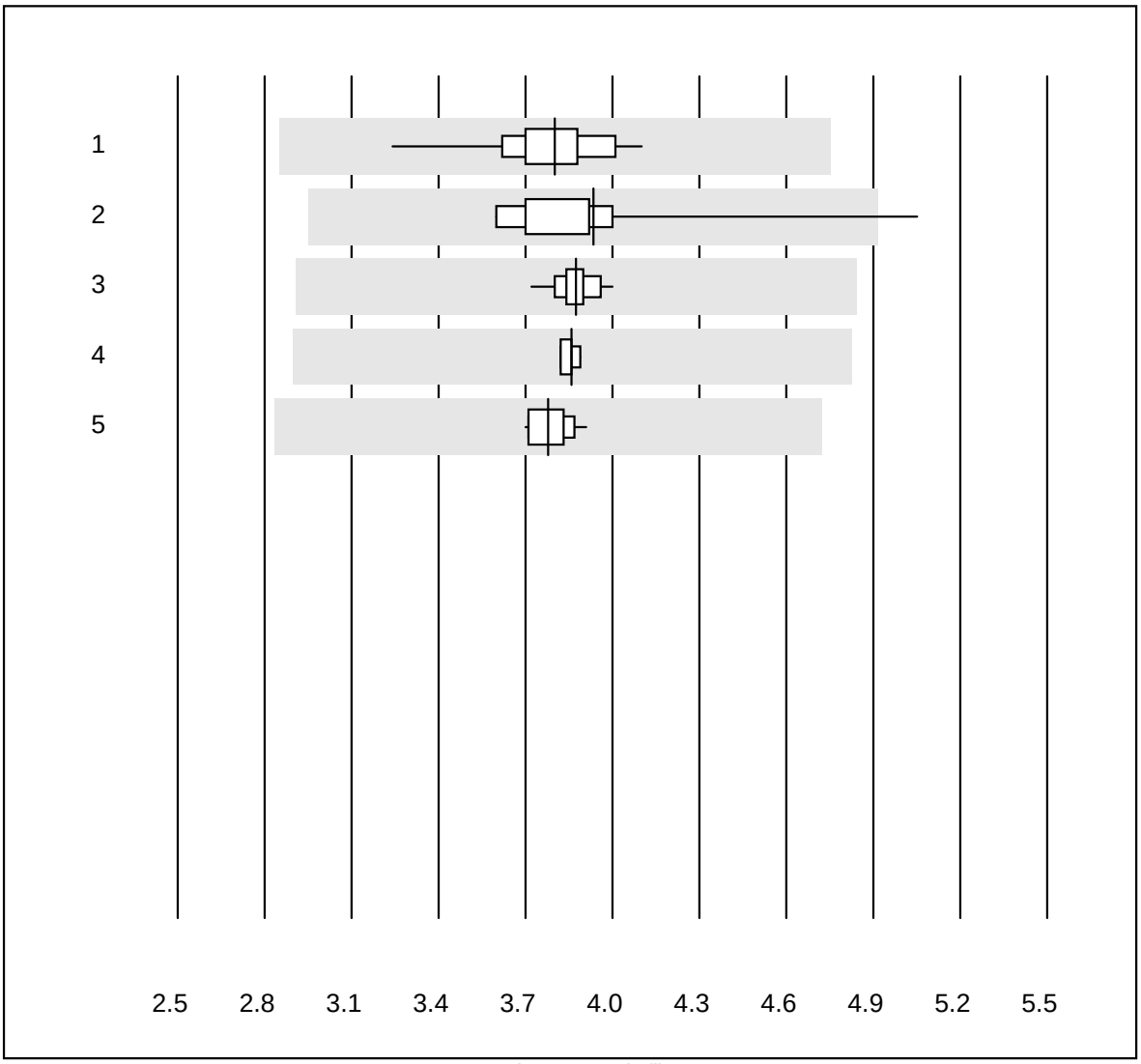


QUALAB tolerance : 9 %

Hematocrit (l/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Micros	941	91.5	4.6	3.9	0.31	4.3	e
2	Microsemi	161	98.2	1.2	0.6	0.31	2.6	e
3	Sysmex KX21	451	96.2	0.9	2.9	0.32	2.5	e
4	Sysmex PocH - 100i	207	96.1	1.0	2.9	0.35	2.9	e
5	Sysmex XP 300	113	97.3	0.9	1.8	0.32	2.3	e
6	Mythic	246	93.1	4.5	2.4	0.33	4.3	e
7	Swelab	66	94.0	1.5	4.5	0.34	3.6	e
8	MS4	8	100.0	0.0	0.0	0.33	4.6	e*
9	Abacus Junior	12	100.0	0.0	0.0	0.35	4.6	e*
10	Medonic	21	95.2	4.8	0.0	0.33	4.1	e
11	Nihon Kohden Celltac	28	96.4	0.0	3.6	0.33	3.1	e
12	Samsung HC10	40	95.0	2.5	2.5	0.35	3.8	e

Erythrocytes

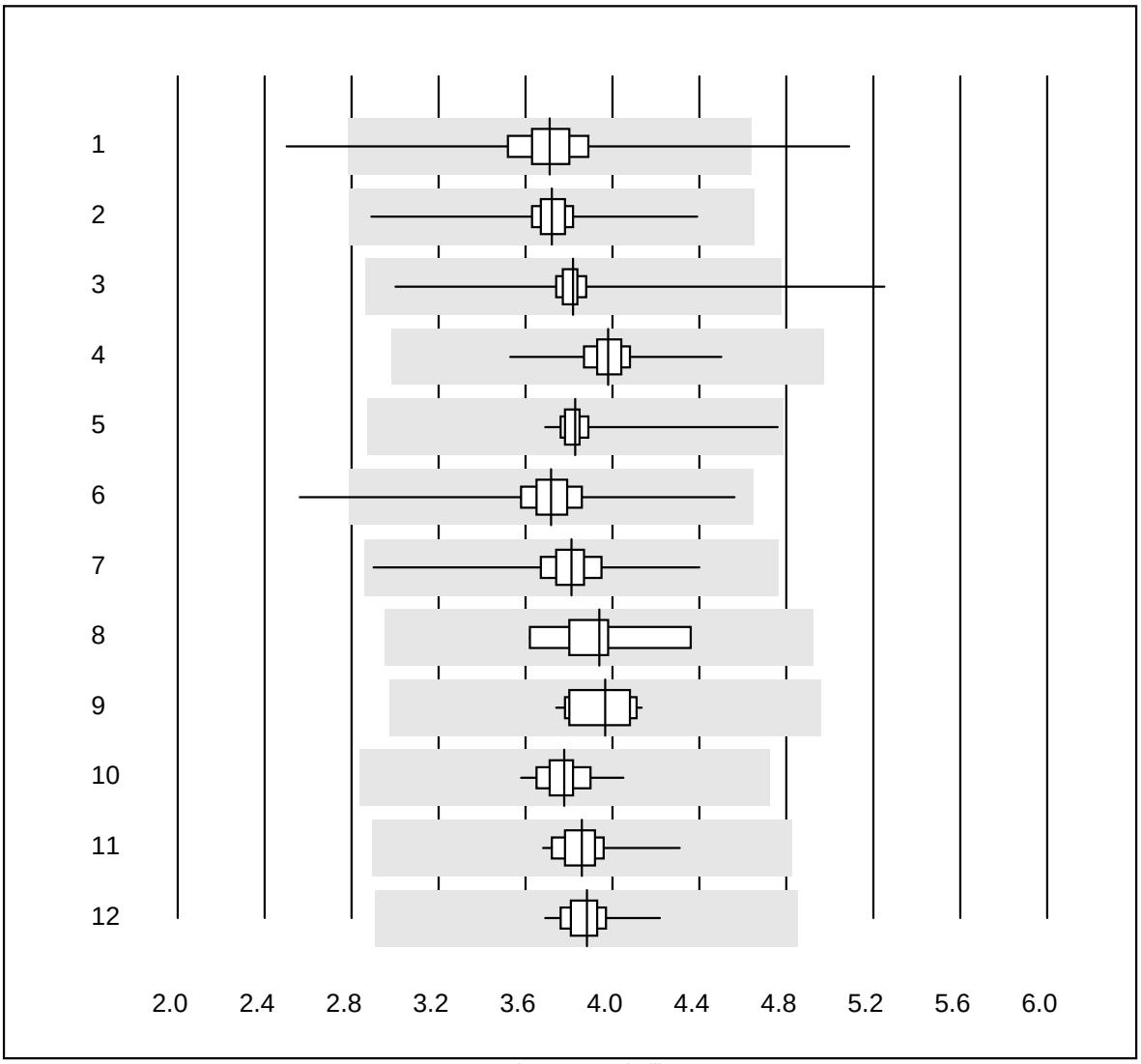


QUALAB tolerance : 25 %

Erythrocytes (T/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Automat	47	97.9	0.0	2.1	3.80	4.2	e
2	Microscopic	11	81.8	9.1	9.1	3.93	10.5	e*
3	Sysmex XT/XE/XS	37	100.0	0.0	0.0	3.87	1.6	e
4	Sysmex K1000	5	80.0	0.0	20.0	3.86	0.8	e
5	ABX Pentra	13	100.0	0.0	0.0	3.78	1.9	e

Erythrocytes

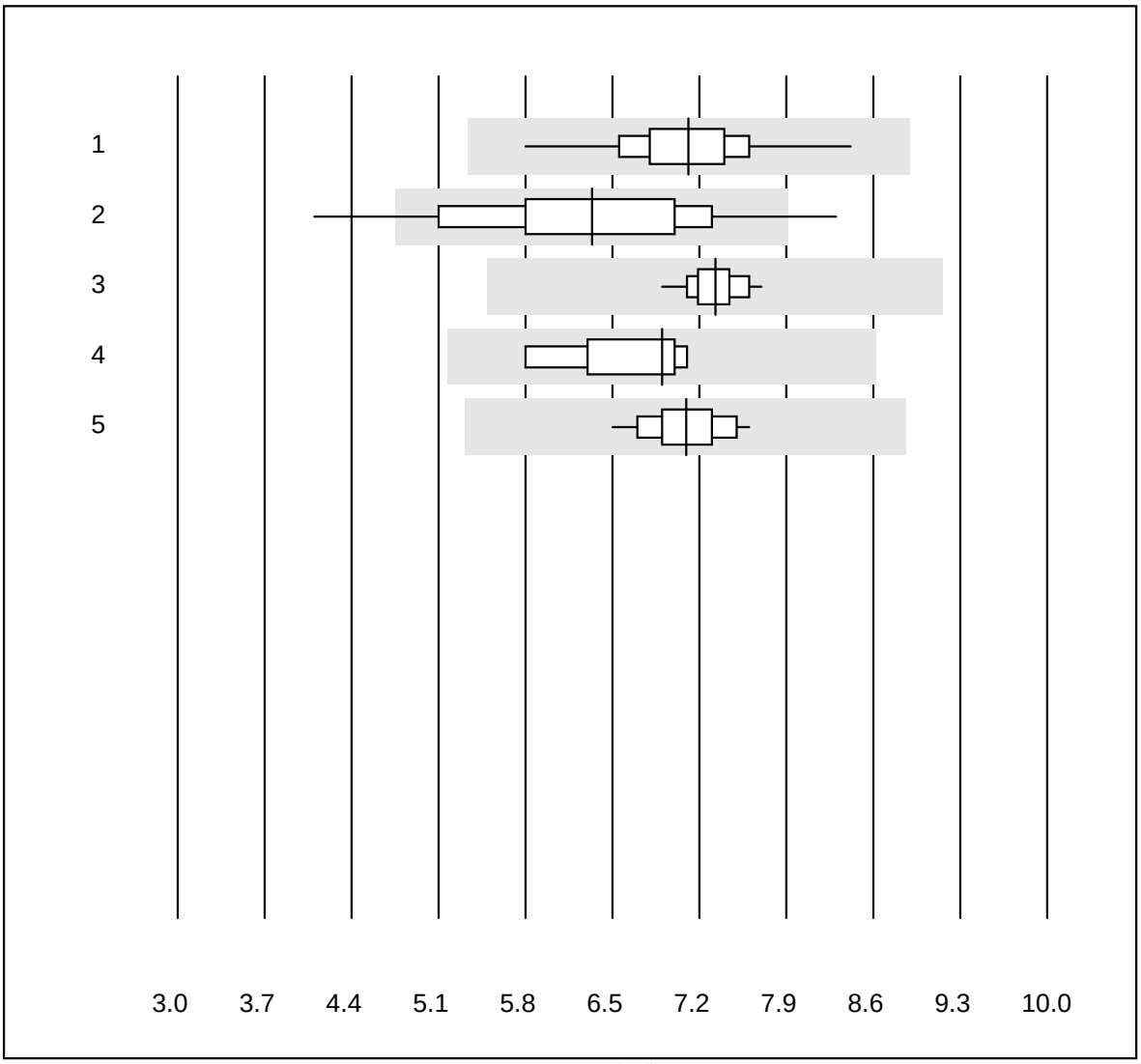


QUALAB tolerance : 25 %

Erythrocytes (T/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Micros	941	97.8	0.7	1.5	3.7	5.5	e
2	Microsemi	162	100.0	0.0	0.0	3.7	3.1	e
3	Sysmex KX21	453	98.1	0.4	1.5	3.8	4.0	e
4	Sysmex PocH - 100i	207	97.6	0.0	2.4	4.0	2.6	e
5	Sysmex XP 300	115	99.1	0.0	0.9	3.8	3.4	e
6	Mythic	247	98.0	0.4	1.6	3.7	4.4	e
7	Swelab	66	95.5	0.0	4.5	3.8	4.8	e
8	MS4	8	100.0	0.0	0.0	3.9	5.4	e
9	Abacus Junior	12	100.0	0.0	0.0	4.0	3.6	e
10	Medonic	21	100.0	0.0	0.0	3.8	3.0	e
11	Samsung HC10	40	97.5	0.0	2.5	3.9	2.9	e
12	Nihon Kohden Celltac	28	96.4	0.0	3.6	3.9	2.6	e

Leucocytes

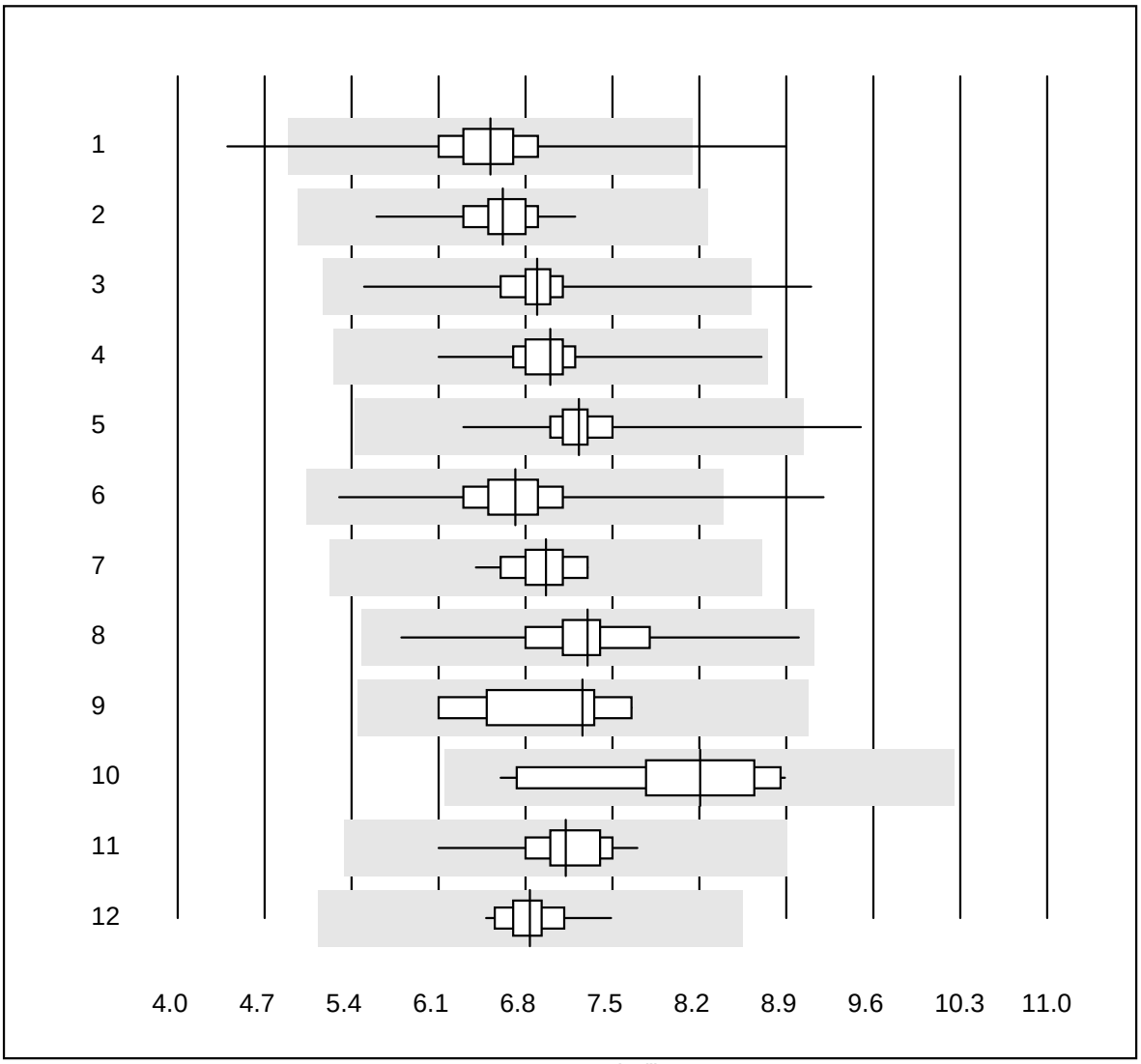


QUALAB tolerance : 25 %

Leucocytes (G/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Automat	43	97.7	0.0	2.3	7.11	7.2	e
2	Microscopic	73	89.1	8.2	2.7	6.34	14.2	e
3	Sysmex XT/XE/XS	38	100.0	0.0	0.0	7.33	2.4	e
4	Sysmex K1000	5	100.0	0.0	0.0	6.90	8.4	e*
5	ABX Pentra	13	100.0	0.0	0.0	7.09	4.4	e

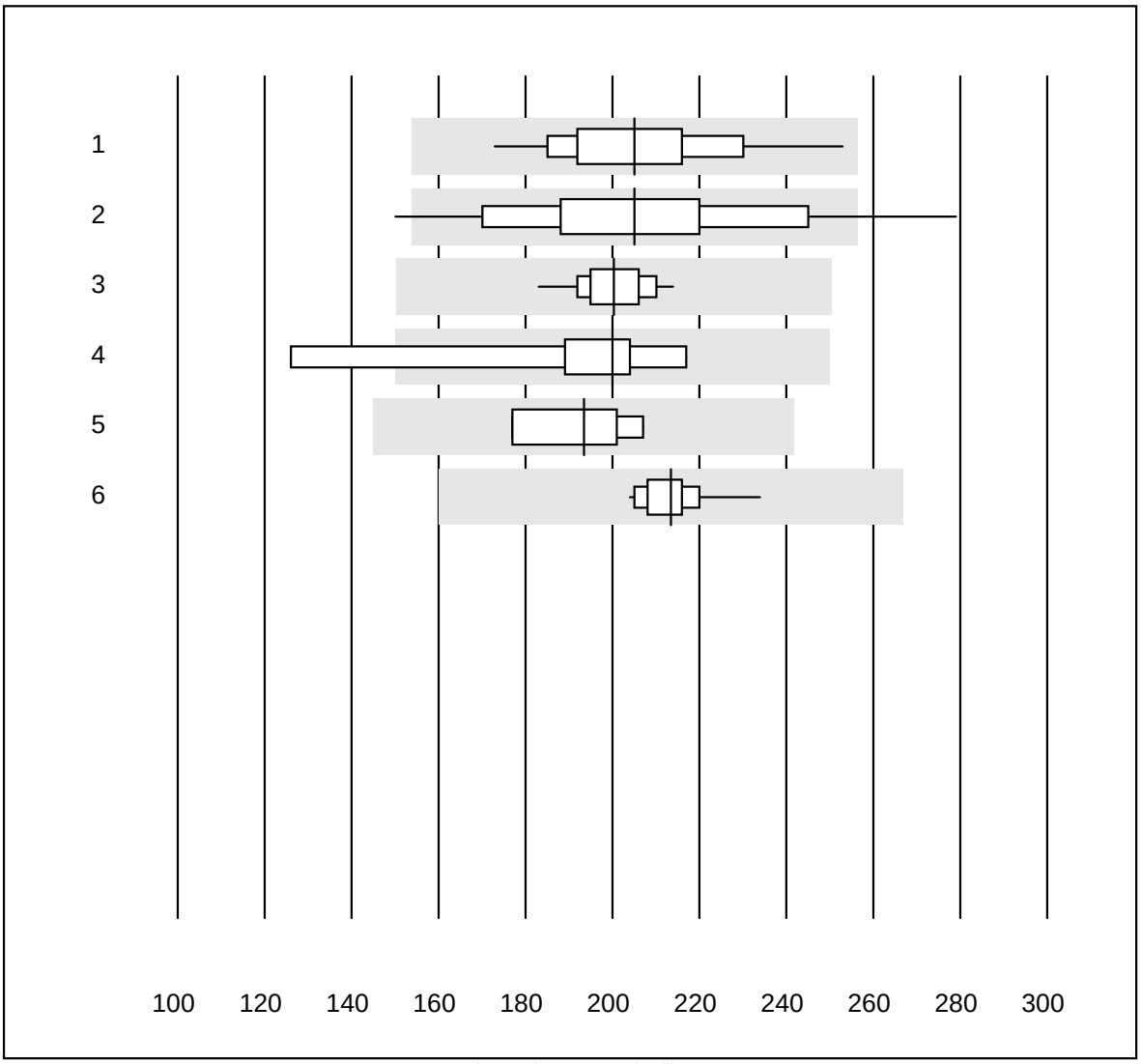
Leucocytes



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Micros	941	99.0	0.7	0.3	6.52	5.5	e
2	Microsemi	162	99.4	0.0	0.6	6.62	3.9	e
3	Sysmex KX21	453	99.2	0.4	0.4	6.89	3.6	e
4	Sysmex PocH - 100i	207	100.0	0.0	0.0	7.00	3.7	e
5	Sysmex XP 300	116	98.2	0.9	0.9	7.23	3.9	e
6	Mythic	245	99.6	0.4	0.0	6.72	5.7	e
7	Nihon Kohden Celltac	28	100.0	0.0	0.0	6.97	3.2	e
8	Swelab	66	100.0	0.0	0.0	7.30	6.8	e
9	MS4	8	100.0	0.0	0.0	7.26	7.7	e
10	Abacus Junior	12	100.0	0.0	0.0	8.20	9.5	e
11	Medonic	21	100.0	0.0	0.0	7.12	5.5	e
12	Samsung HC10	40	100.0	0.0	0.0	6.84	3.0	e

Thrombocytes

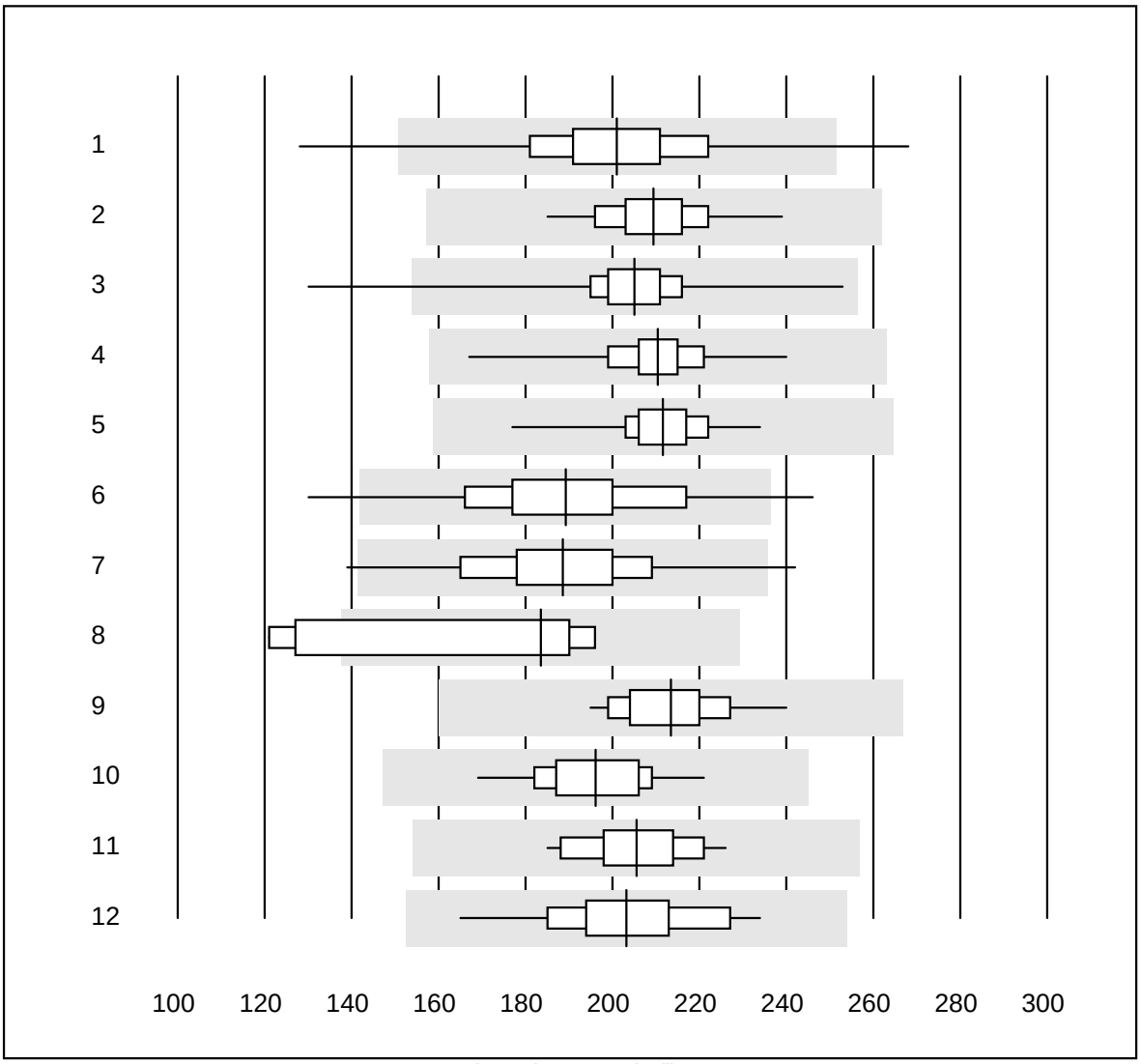


QUALAB tolerance : 25 %

Thrombocytes (G/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Automat	40	97.5	0.0	2.5	205.1	9.0	e
2	Microscopic	47	87.2	8.5	4.3	205.0	14.6	e
3	Sysmex XT/XE/XS	38	100.0	0.0	0.0	200.3	3.8	e
4	Sysmex K1000	5	80.0	20.0	0.0	200.0	19.0	e*
5	Advia 120	4	100.0	0.0	0.0	193.5	7.1	e*
6	ABX Pentra	13	100.0	0.0	0.0	213.4	3.7	e

Thrombocytes

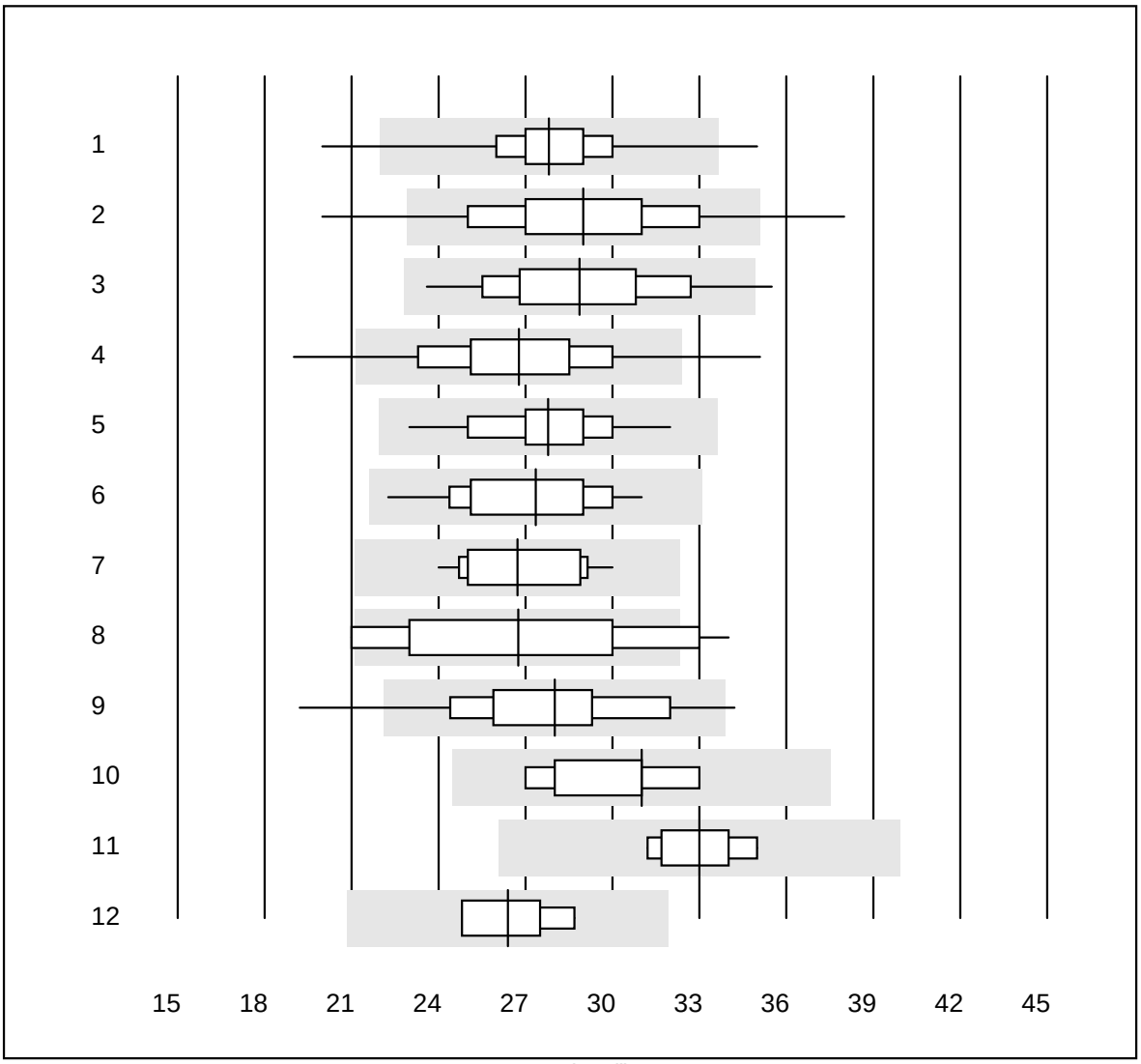


QUALAB tolerance : 25 %

Thrombocytes (G/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Micros	941	97.3	1.4	1.3	201.1	8.7	e
2	Microsemi	162	99.4	0.0	0.6	209.5	4.7	e
3	Sysmex KX21	453	99.6	0.2	0.2	205.0	4.6	e
4	Sysmex PocH - 100i	206	98.5	0.0	1.5	210.4	4.3	e
5	Sysmex XP 300	116	99.1	0.0	0.9	211.6	4.1	e
6	Mythic	247	96.4	2.8	0.8	189.2	10.6	e
7	Swelab	66	95.5	3.0	1.5	188.5	9.8	e
8	MS4	8	62.5	37.5	0.0	183.5	19.9	e*
9	Abacus Junior	12	100.0	0.0	0.0	213.4	5.9	e
10	Medonic	21	100.0	0.0	0.0	196.1	6.7	e
11	Nihon Kohden Celltac	28	96.4	0.0	3.6	205.6	5.5	e
12	Samsung HC10	40	95.0	0.0	5.0	203.2	8.4	e

CRP

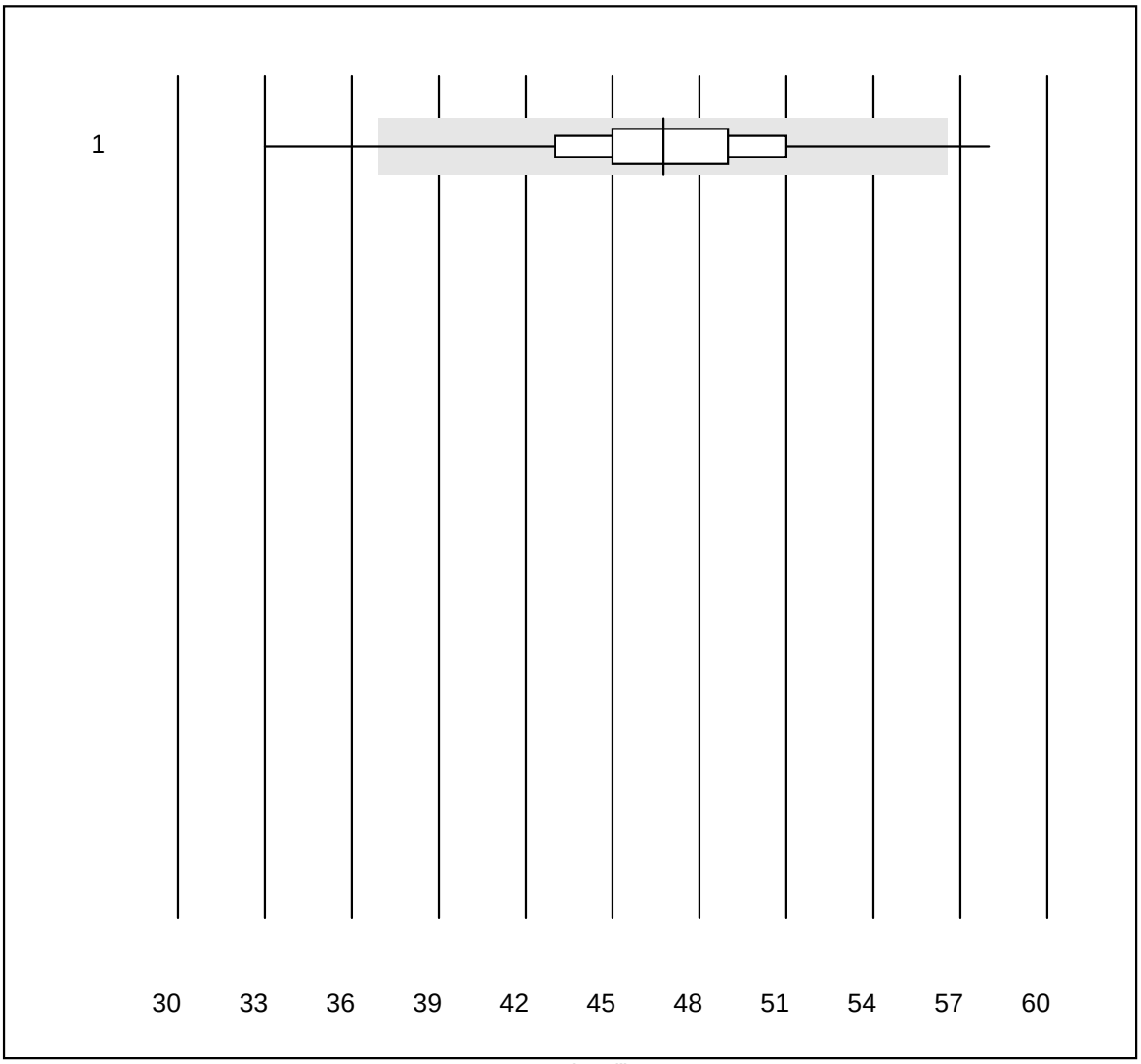


QUALAB tolerance : 21 %

CRP (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Afinion	1086	99.3	0.5	0.2	27.8	6.4	e
2	NycoCard SingleTest-	523	82.4	6.3	11.3	29.0	12.1	e
3	Abx Micros	167	95.8	1.2	3.0	28.9	9.4	e
4	ABX Micros CRP200	345	94.2	3.8	2.0	26.8	10.1	e
5	Quick Read go	67	100.0	0.0	0.0	27.8	6.7	e
6	Turbidimetry	37	91.9	0.0	8.1	27.3	8.9	e
7	Cobas	11	100.0	0.0	0.0	26.7	7.3	e
8	Fuji Dri-Chem	20	75.0	20.0	5.0	26.7	15.3	e*
9	Eurolyser	113	76.1	3.5	20.4	28.0	10.8	e
10	AQT 90 FLEX	7	100.0	0.0	0.0	31.0	6.8	e*
11	Spotchem D-Concept	7	100.0	0.0	0.0	33.0	4.3	e
12	Other methods	4	100.0	0.0	0.0	26.4	6.9	e*

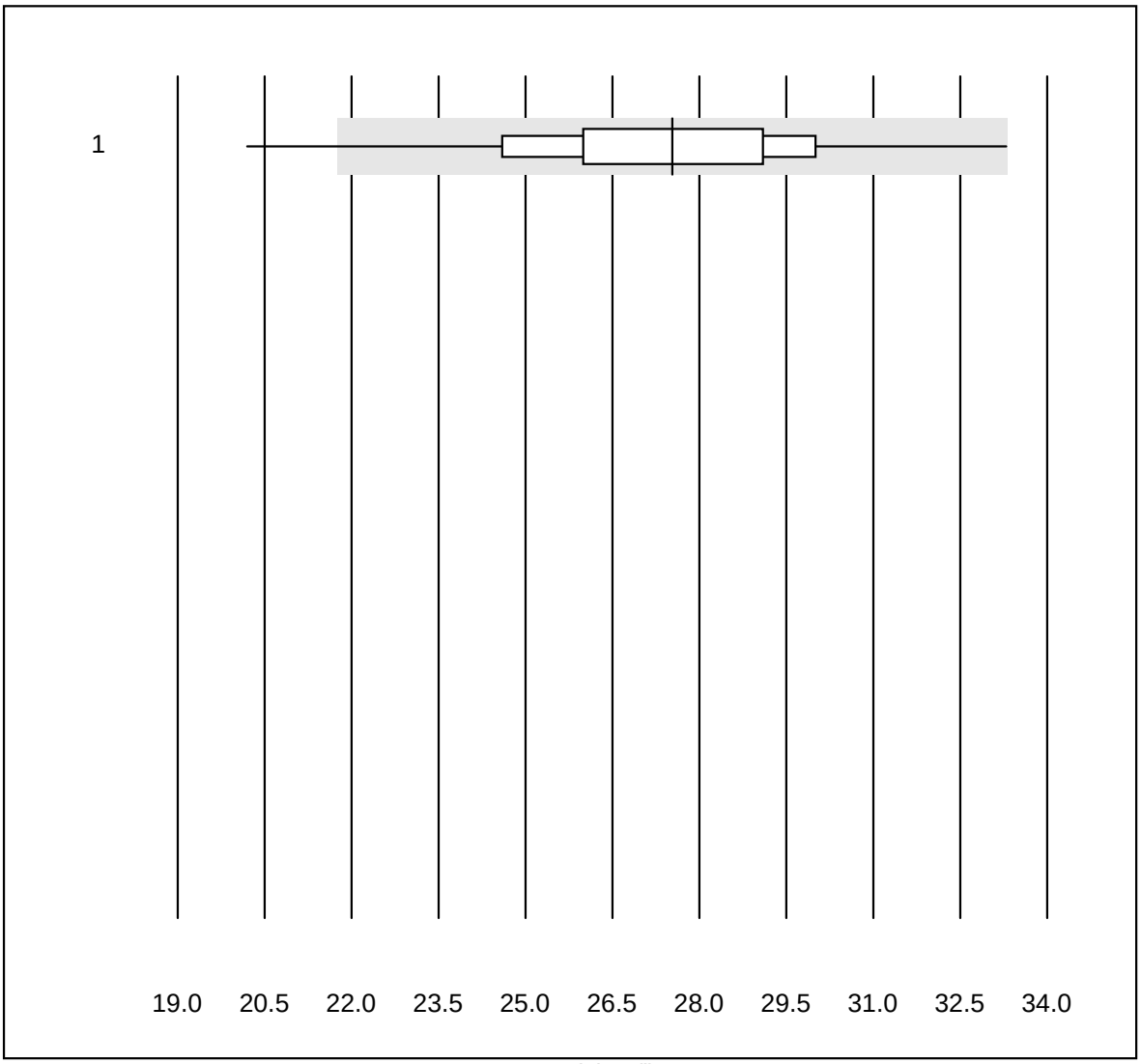
CRP



QUALAB tolerance : 21 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	QuikRead (Vollblut)	202	97.0	2.5	0.5	46.7	7.6	e

CRP emi

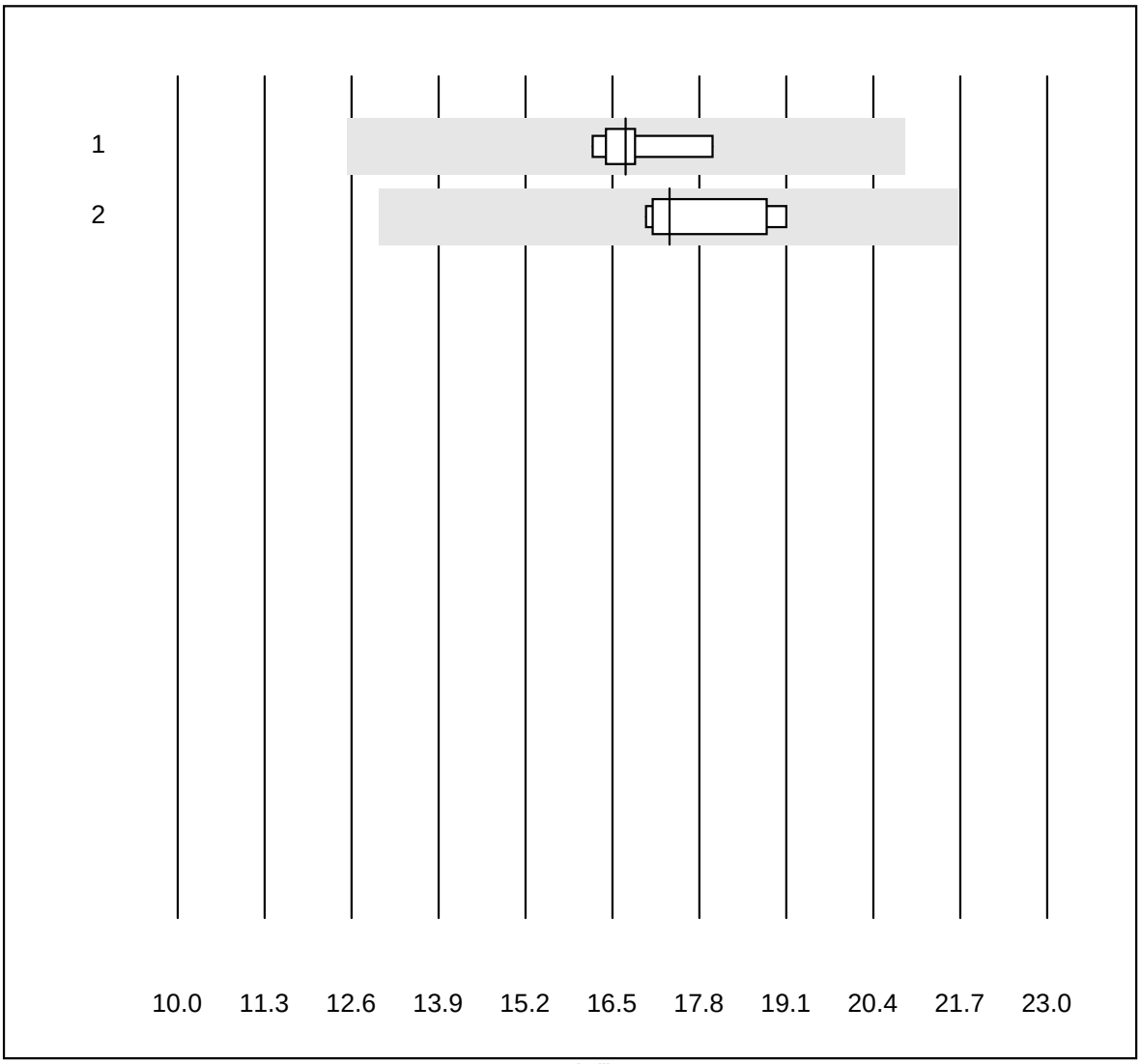


QUALAB tolerance : 21 %

CRP emi (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Microsemi	156	99.4	0.6	0.0	27.5	8.1	e

IgG

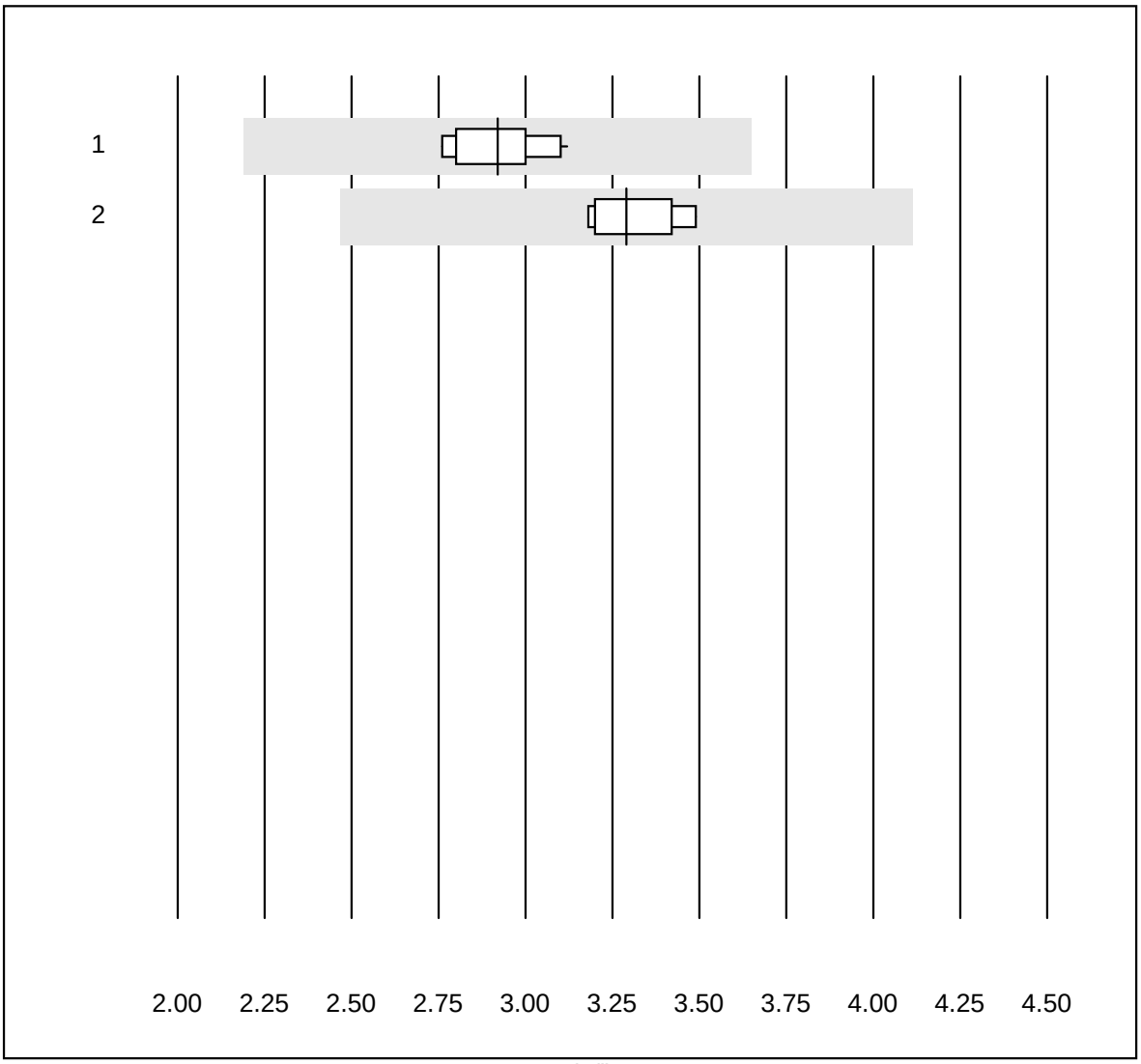


QUALAB tolerance : 25 %

IgG (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Turbidimetry	9	100.0	0.0	0.0	16.7	3.7	e
2	Nephelometry	6	100.0	0.0	0.0	17.4	4.9	e

IgA

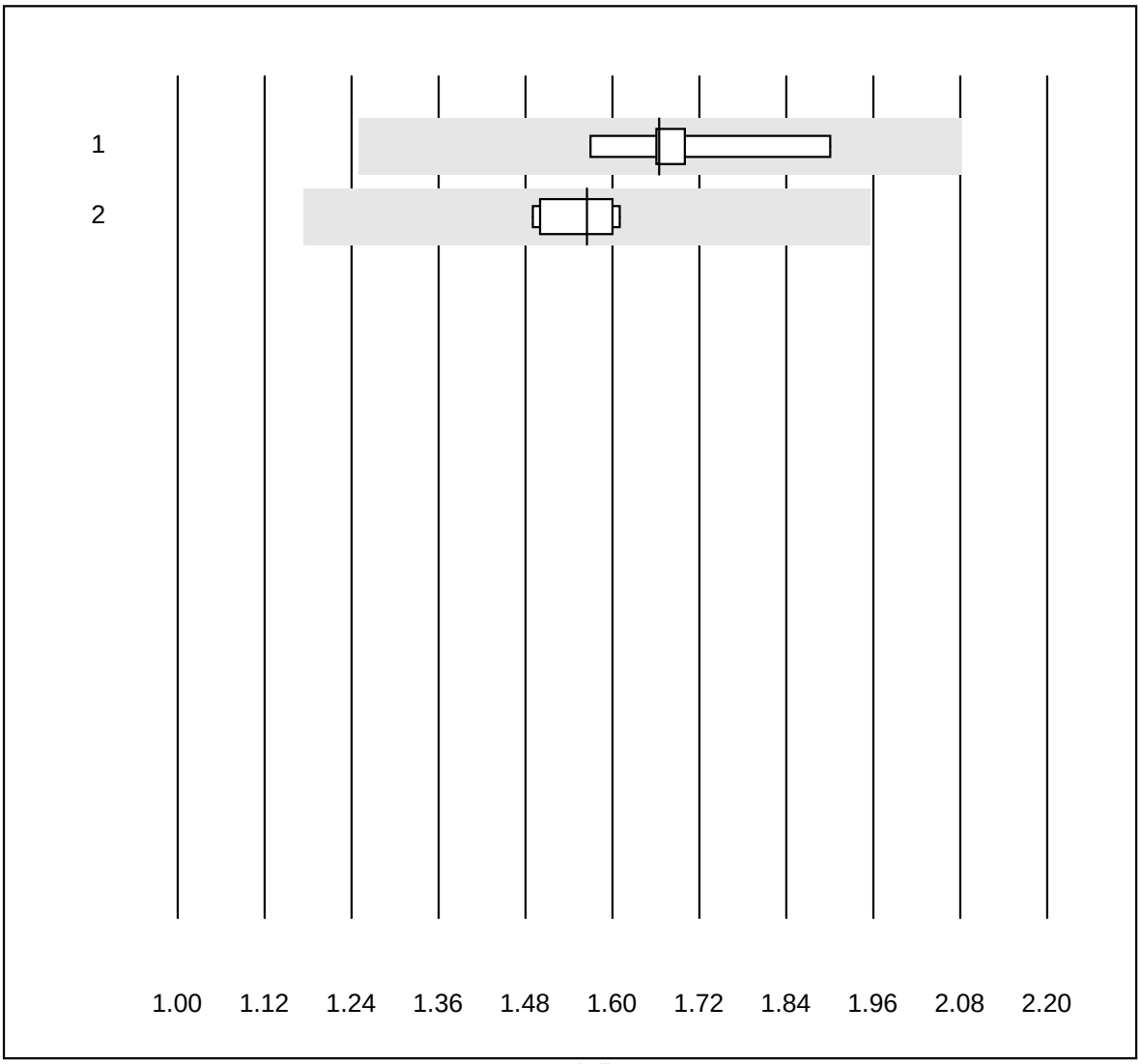


QUALAB tolerance : 25 %

IgA (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Turbidimetry	10	100.0	0.0	0.0	2.9	4.6	e
2	Nephelometry	6	100.0	0.0	0.0	3.3	3.7	e

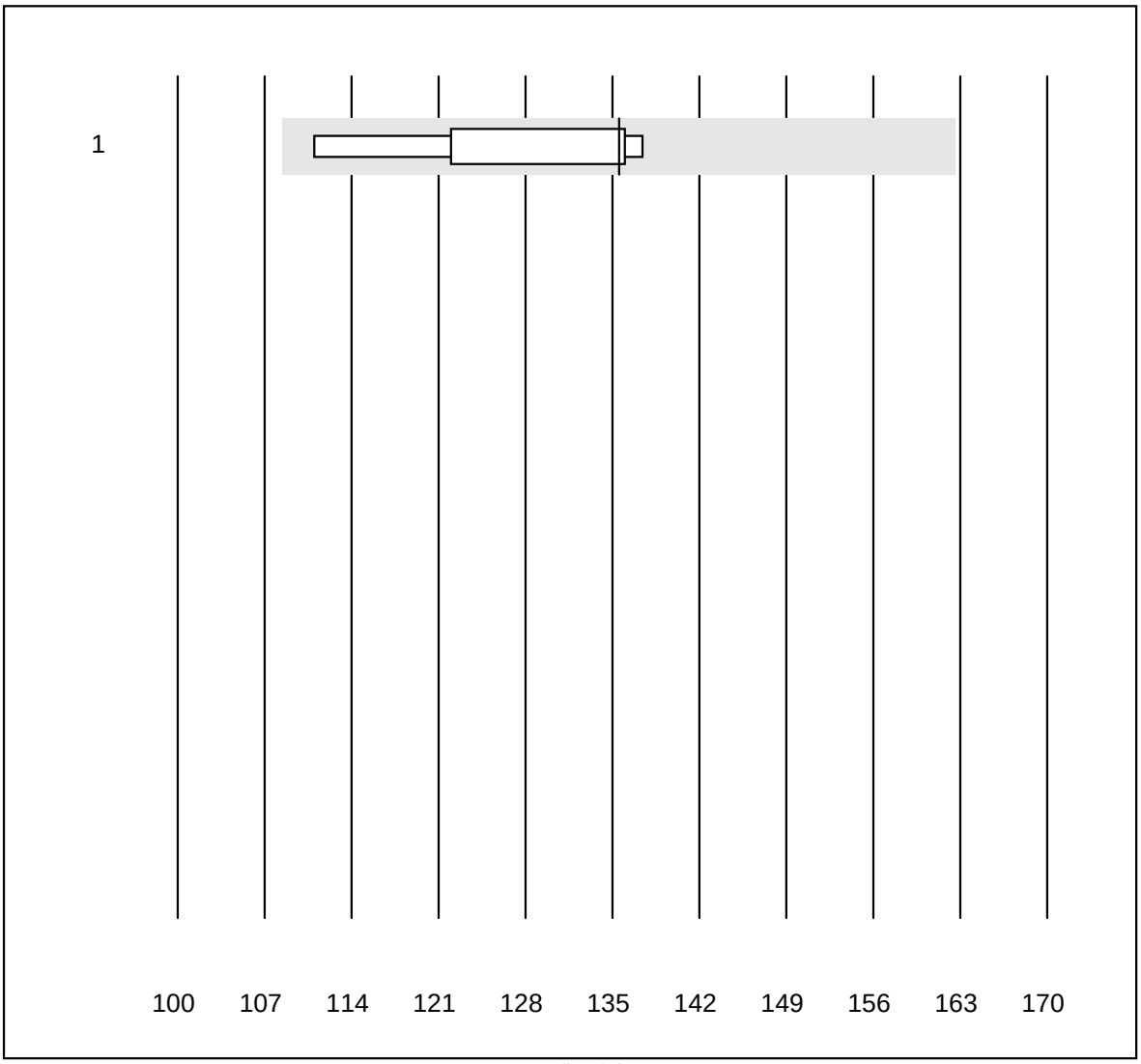
IgM



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Nephelometry	6	100.0	0.0	0.0	1.7	6.5	e
2	Cobas Integra 800/40	6	100.0	0.0	0.0	1.6	3.2	e

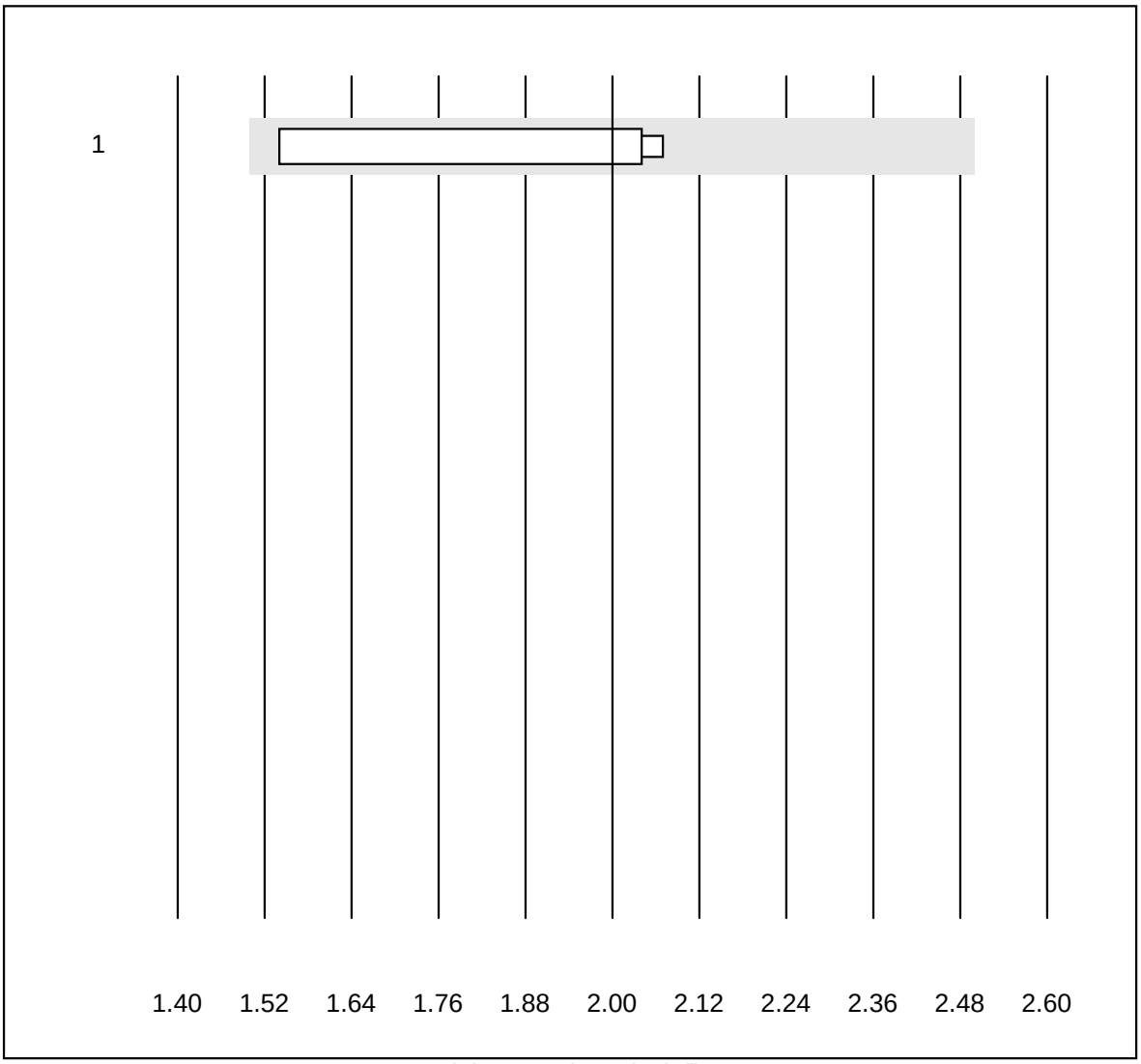
IgE



QUALAB tolerance : 20 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	8	100.0	0.0	0.0	136	7.5	e*

Alpha-1-Antitrypsin

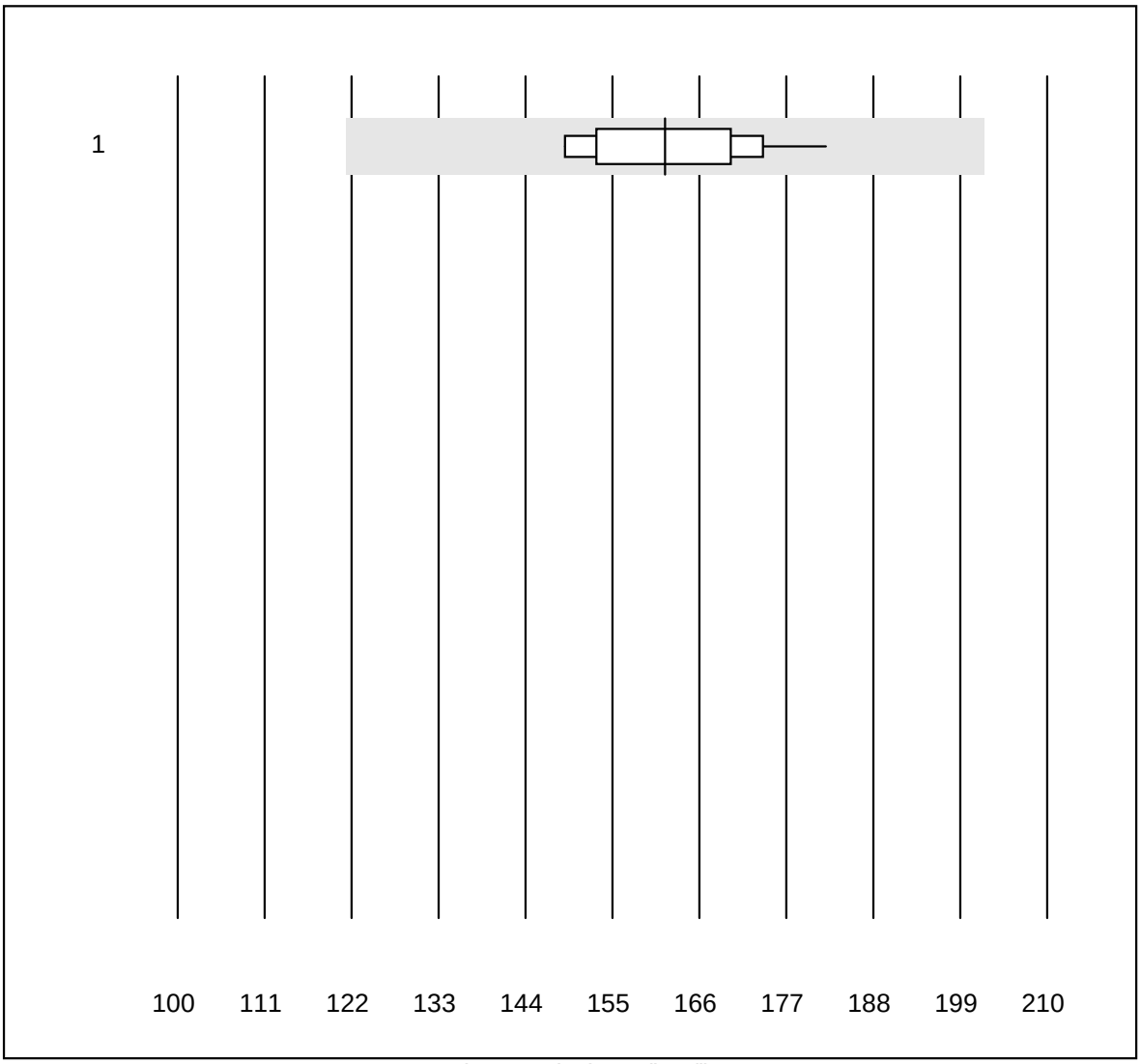


QUALAB tolerance : 25 %

Alpha-1-Antitrypsin (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Nephelometry	4	100.0	0.0	0.0	2.00	12.9	e*

Anti-streptolysin-O

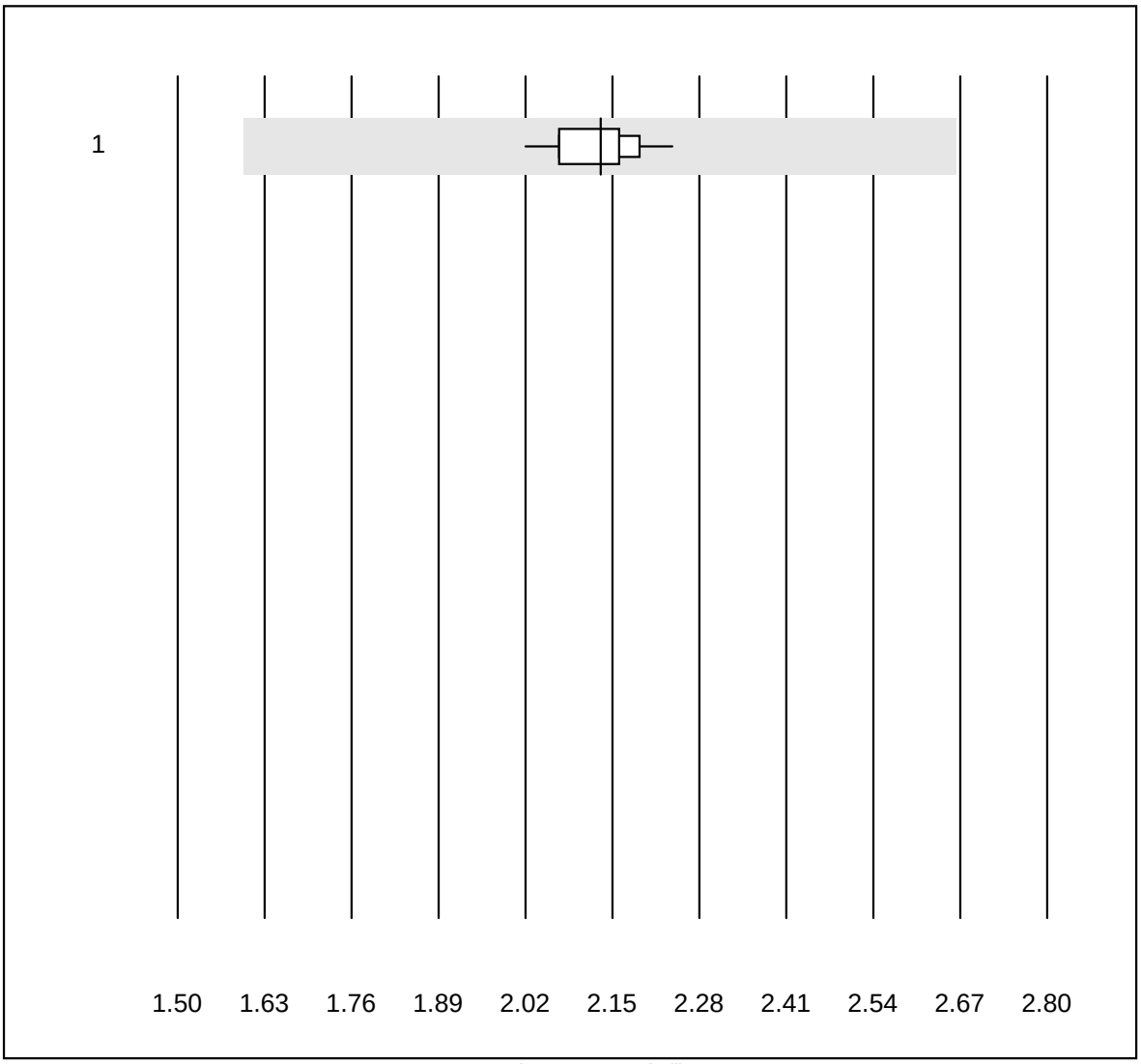


QUALAB tolerance : 25 %

Anti-streptolysin-O (kIU/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	10	100.0	0.0	0.0	162	6.6	e

Complement C3

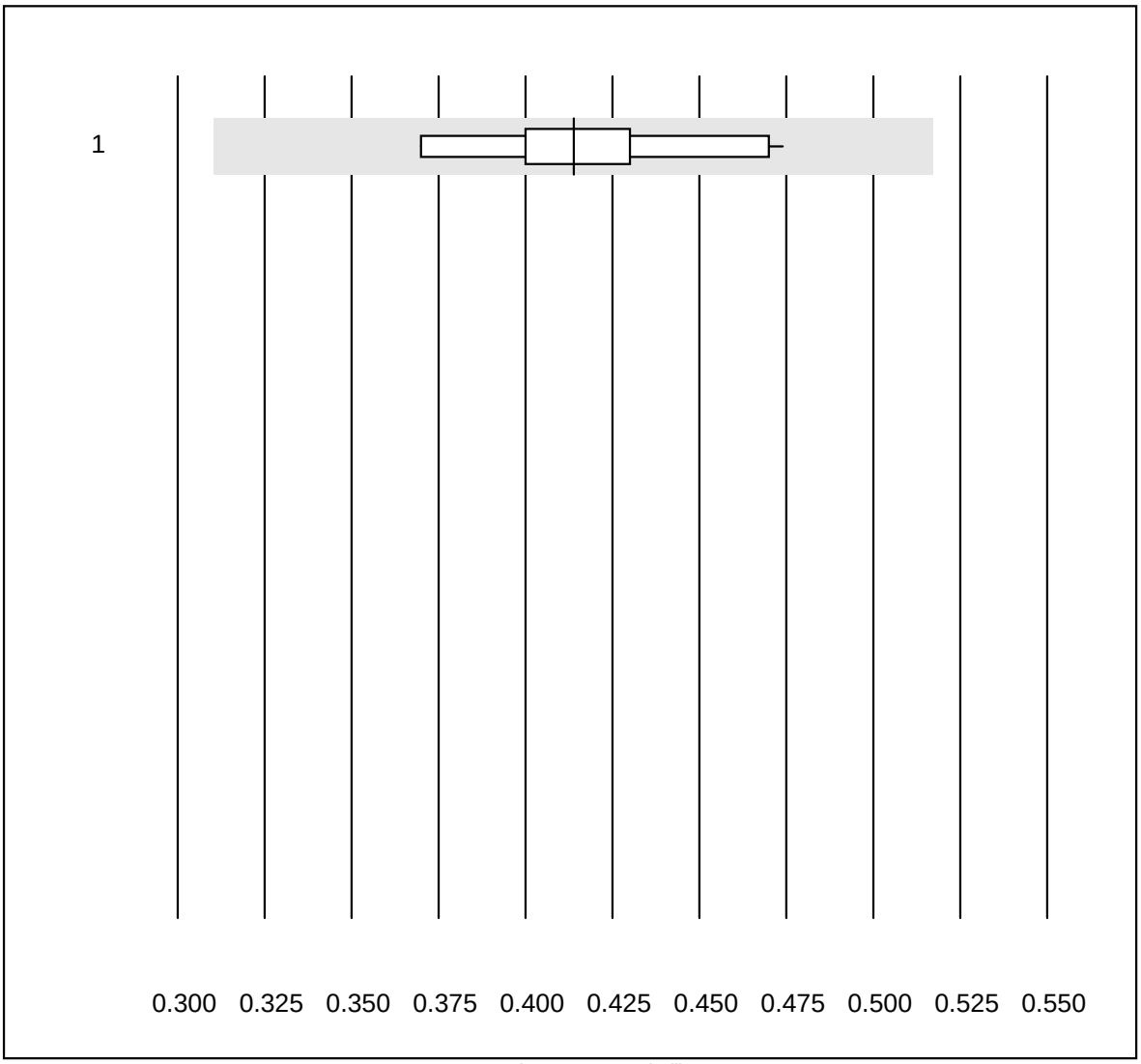


QUALAB tolerance : 25 %

Complement C3 (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	11	100.0	0.0	0.0	2.13	2.9	e

Complement C4

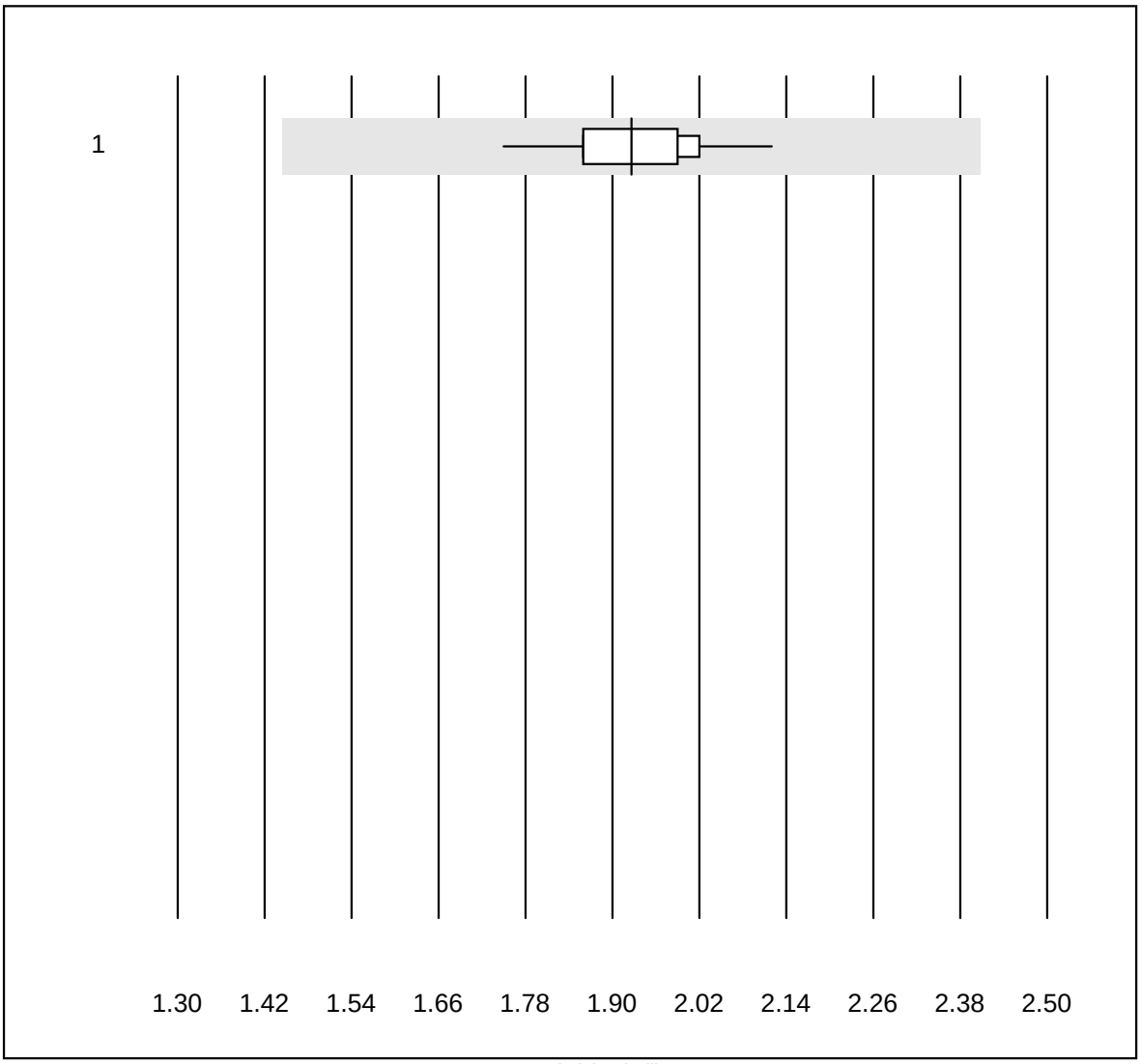


QUALAB tolerance : 25 %

Complement C4 (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	10	100.0	0.0	0.0	0.41	8.1	e

Haptoglobin

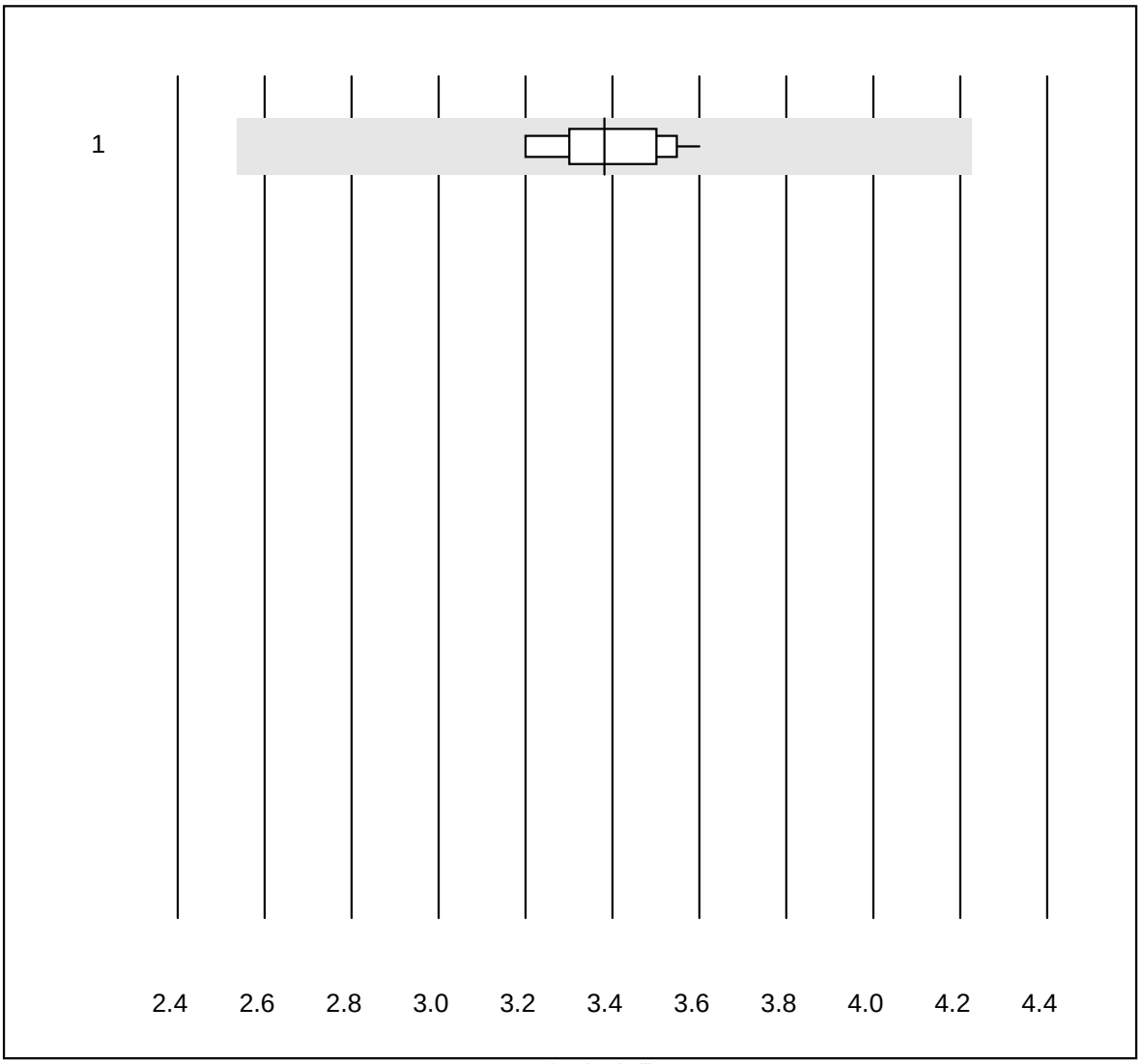


QUALAB tolerance : 25 %

Haptoglobin (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	12	100.0	0.0	0.0	1.93	5.1	e

Transferrin

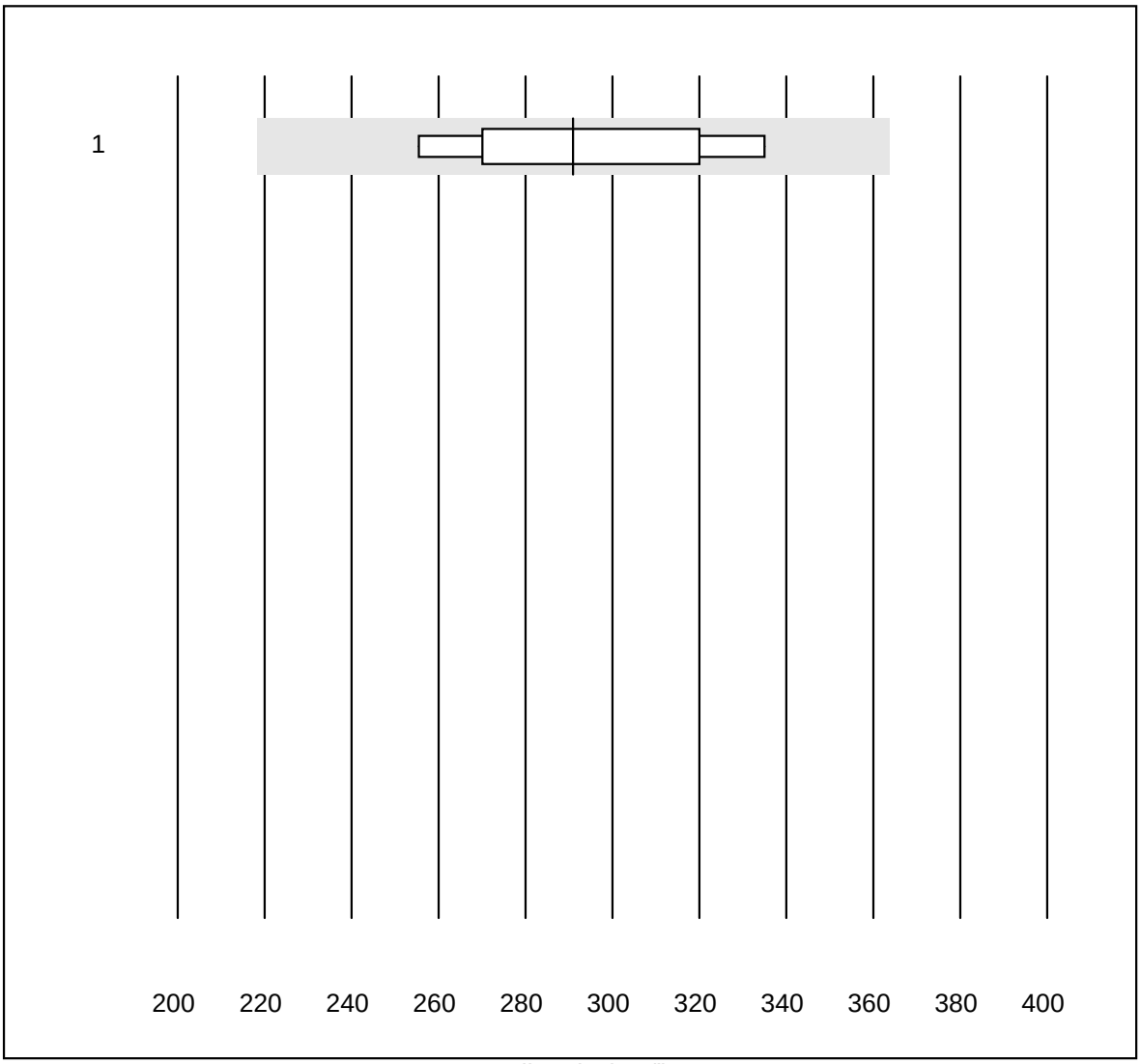


QUALAB tolerance : 25 %

Transferrin (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	14	100.0	0.0	0.0	3.38	3.7	e

Präalbumin

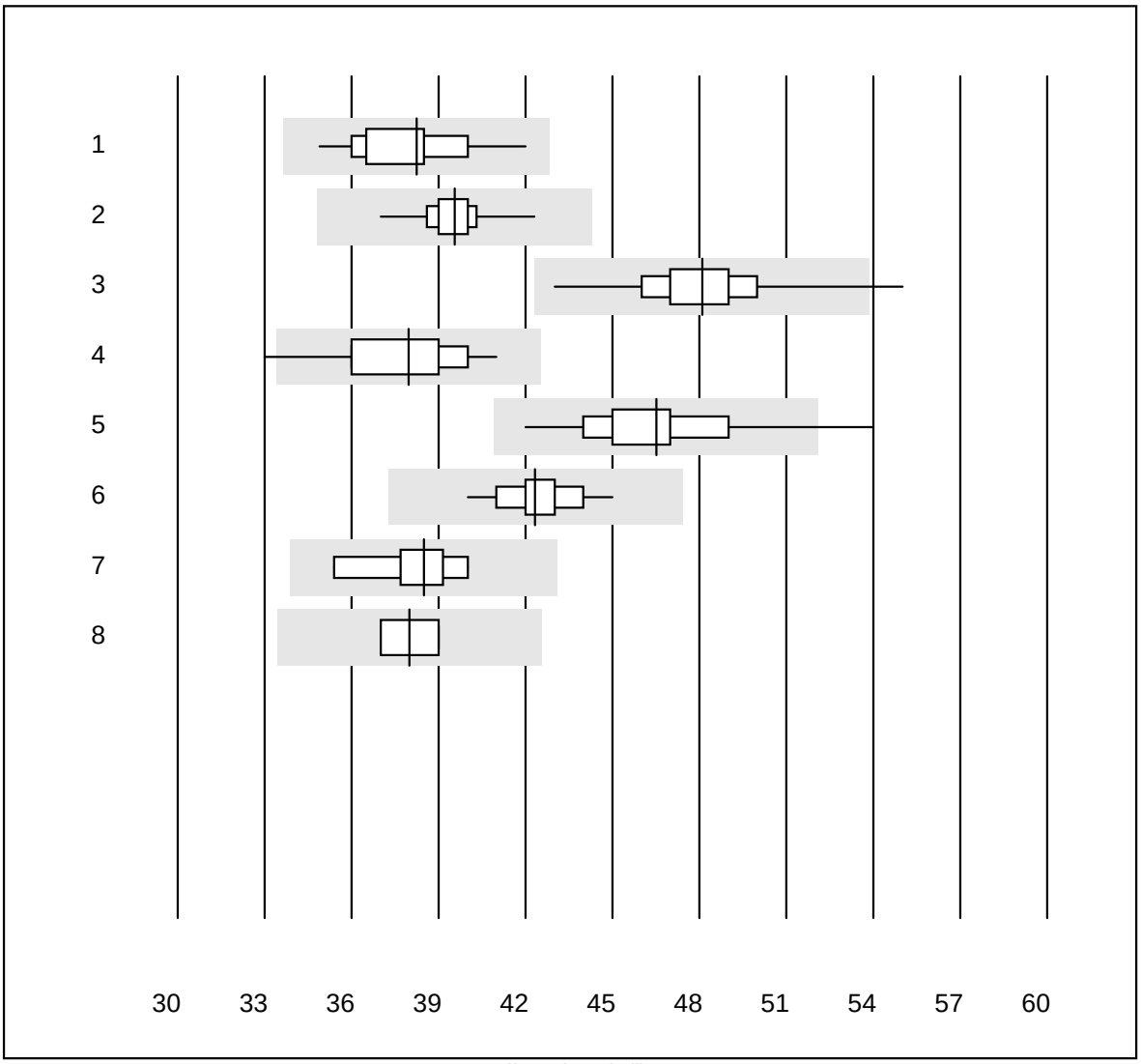


QUALAB tolerance : 25 %

Präalbumin (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	8	87.5	0.0	12.5	291.0	9.6	e*

Albumine

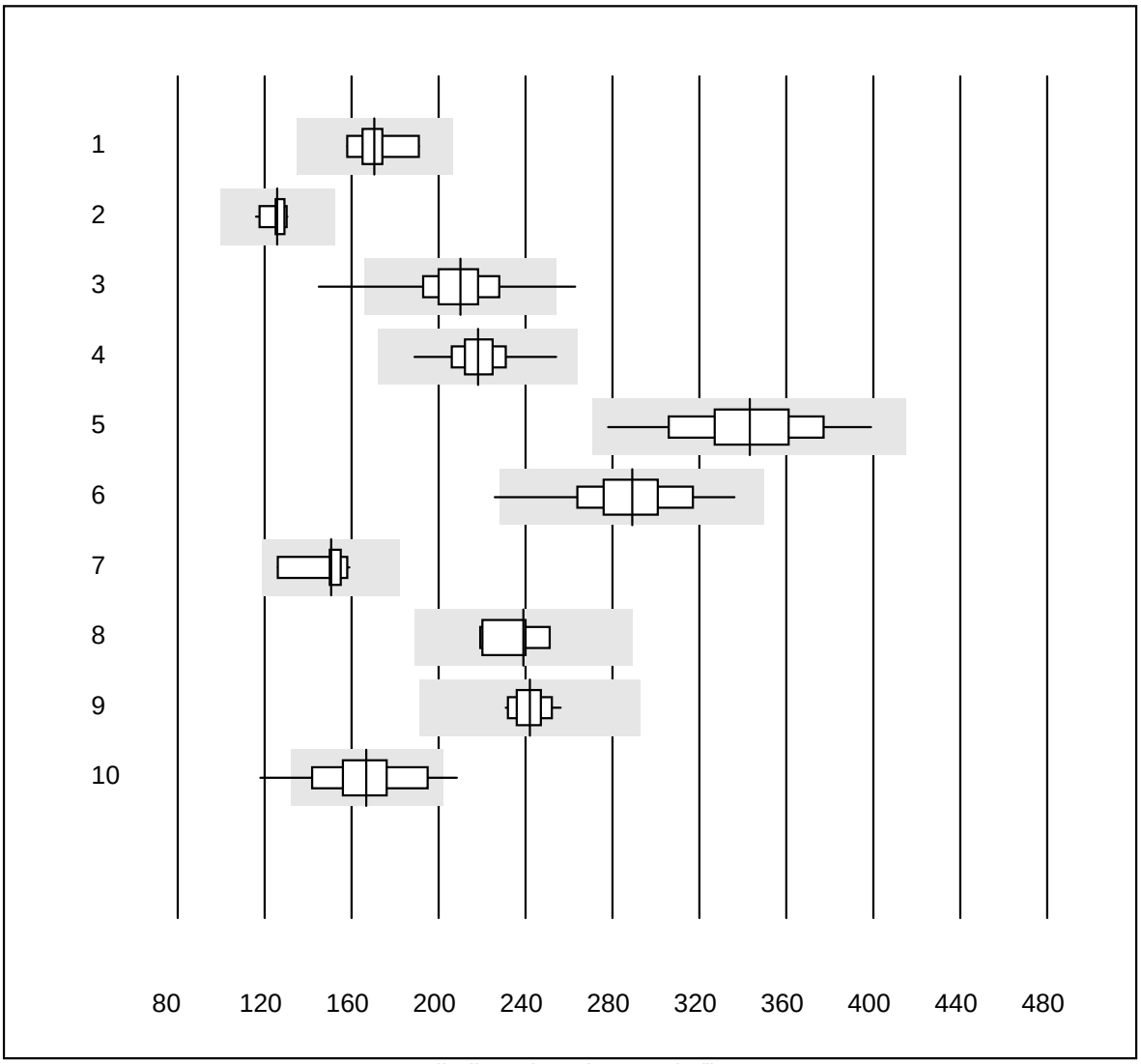


QUALAB tolerance : 12 %

Albumine (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	14	92.9	0.0	7.1	38	5.0	a
2	Cobas	14	100.0	0.0	0.0	40	2.9	e
3	Fuji Dri-Chem	152	98.0	0.7	1.3	48	3.9	e
4	Spotchem/Ready	48	93.7	2.1	4.2	38	4.9	e
5	Spotchem D-Concept	61	96.8	1.6	1.6	47	4.5	e
6	Piccolo	18	100.0	0.0	0.0	42	2.9	e
7	Abx Mira	6	100.0	0.0	0.0	39	4.2	e*
8	Hitachi S40/M40	6	83.3	0.0	16.7	38	2.9	e

Alkaline phosphatase

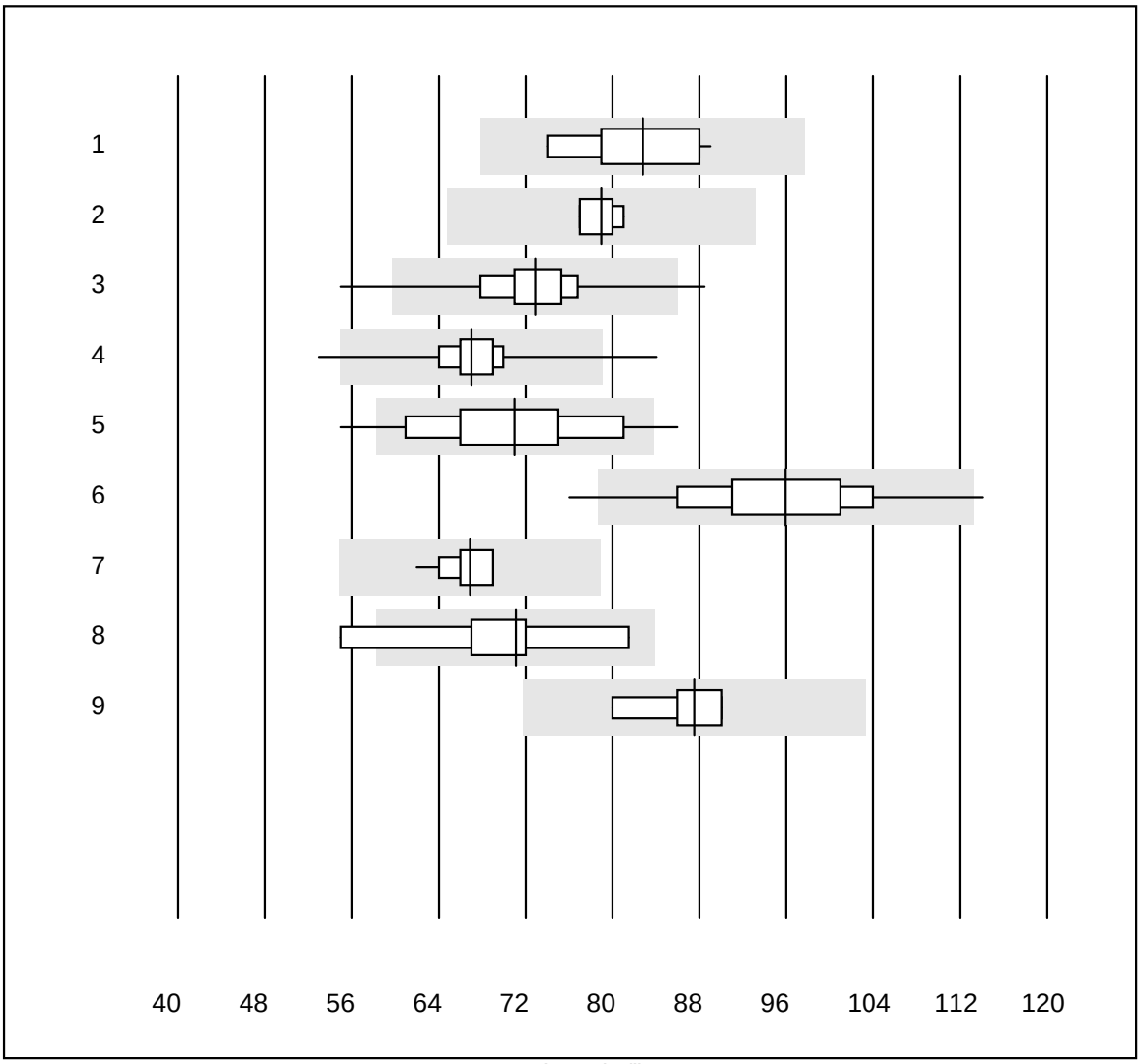


QUALAB tolerance : 21 %

Alkaline phosphatase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC/SGKC 37'C	8	100.0	0.0	0.0	171	6.0	e
2	Cobas	19	100.0	0.0	0.0	126	3.5	e
3	Reflotron	717	98.5	0.8	0.7	210	7.0	e
4	Fuji Dri-Chem	613	97.9	0.0	2.1	218	4.7	e
5	Spotchem/Ready	131	100.0	0.0	0.0	343	7.6	e
6	Spotchem D-Concept	111	95.5	0.9	3.6	289	7.0	e
7	Hitachi S40/M40	10	100.0	0.0	0.0	151	6.2	e
8	Olympus	5	100.0	0.0	0.0	239	5.9	e*
9	Piccolo	18	100.0	0.0	0.0	242	3.1	e
10	Abx Mira	20	85.0	15.0	0.0	167	12.5	e*

Amylase

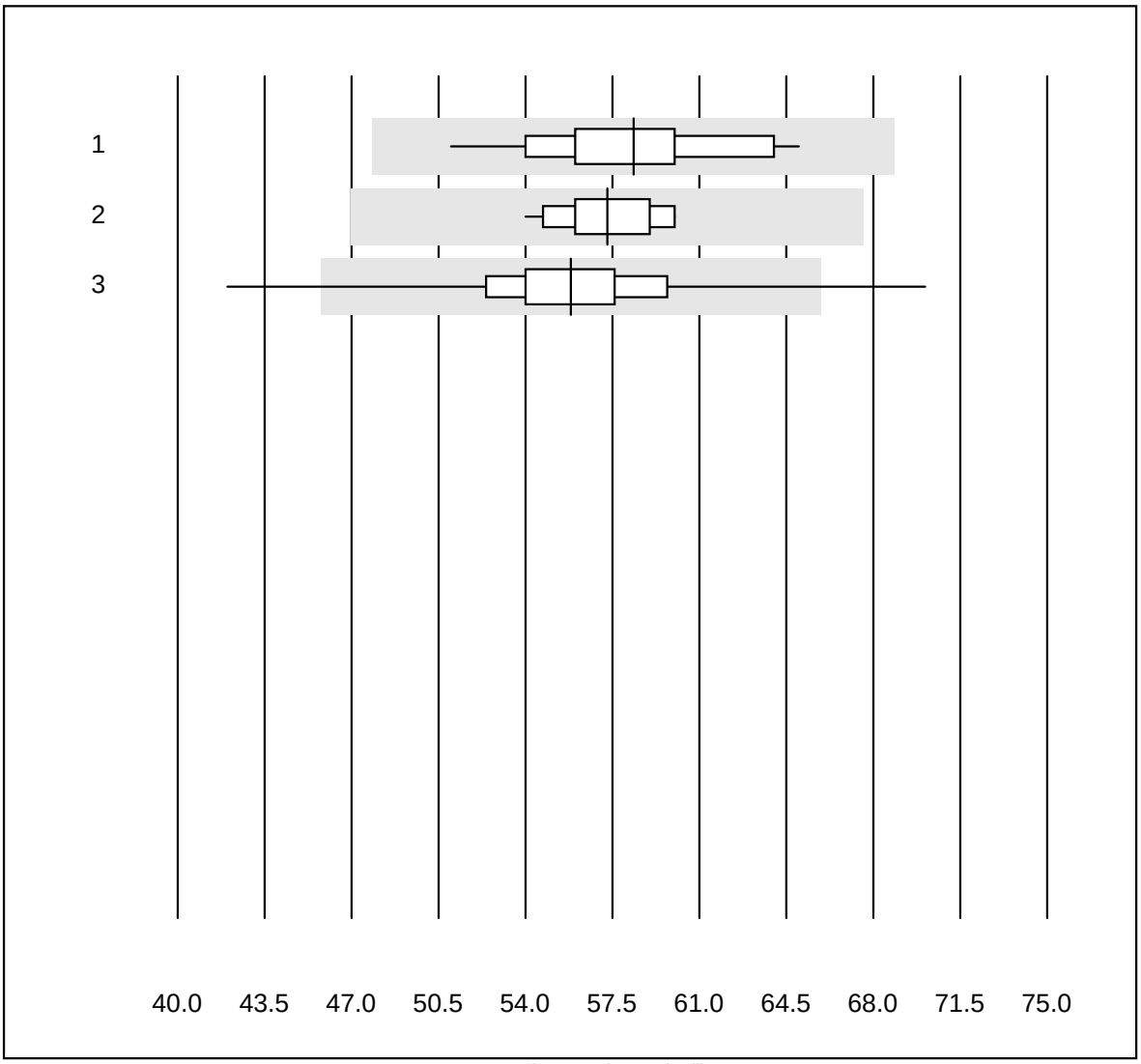


QUALAB tolerance : 18 %

Amylase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC EPS liquid 37°C	10	100.0	0.0	0.0	83	6.3	e
2	Cobas	7	100.0	0.0	0.0	79	2.0	e
3	Reflotron	192	96.9	2.1	1.0	73	6.0	e
4	Fuji Dri-Chem	459	98.7	1.1	0.2	67	4.5	e
5	Spotchem/Ready	85	81.2	8.2	10.6	71	10.4	e
6	Spotchem D-Concept	88	97.7	2.3	0.0	96	7.4	e
7	Piccolo	18	100.0	0.0	0.0	67	2.9	e
8	Abx Mira	8	87.5	12.5	0.0	71	10.7	e*
9	Hitachi S40/M40	6	100.0	0.0	0.0	88	4.3	e

Pancreatic amylase

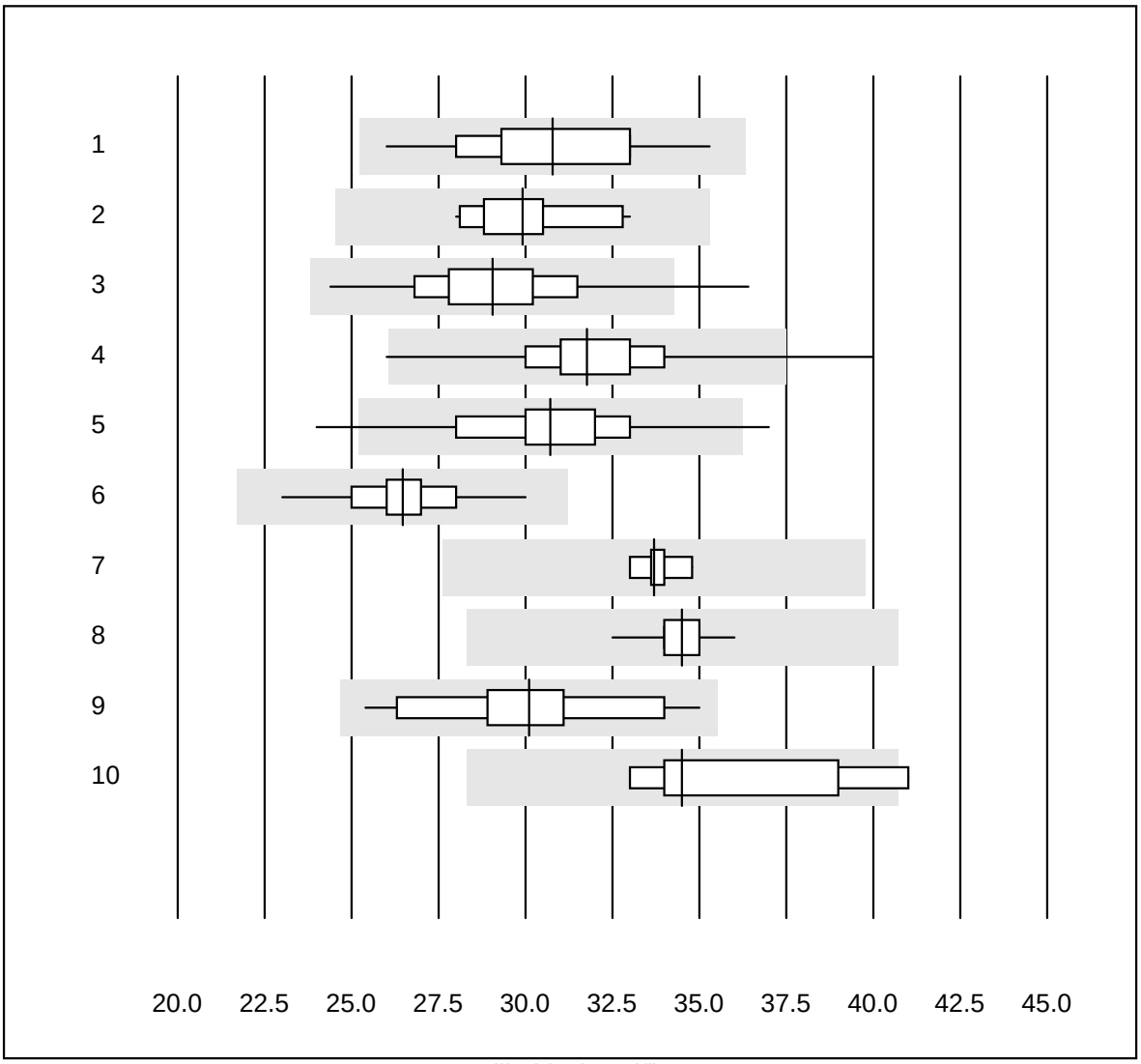


QUALAB tolerance : 18 %

Pancreatic amylase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC EPS liquid 37°C	17	100.0	0.0	0.0	58	6.3	e
2	Cobas	13	100.0	0.0	0.0	57	3.4	e
3	Reflotron	456	97.2	1.5	1.3	56	5.7	e

Bilirubin

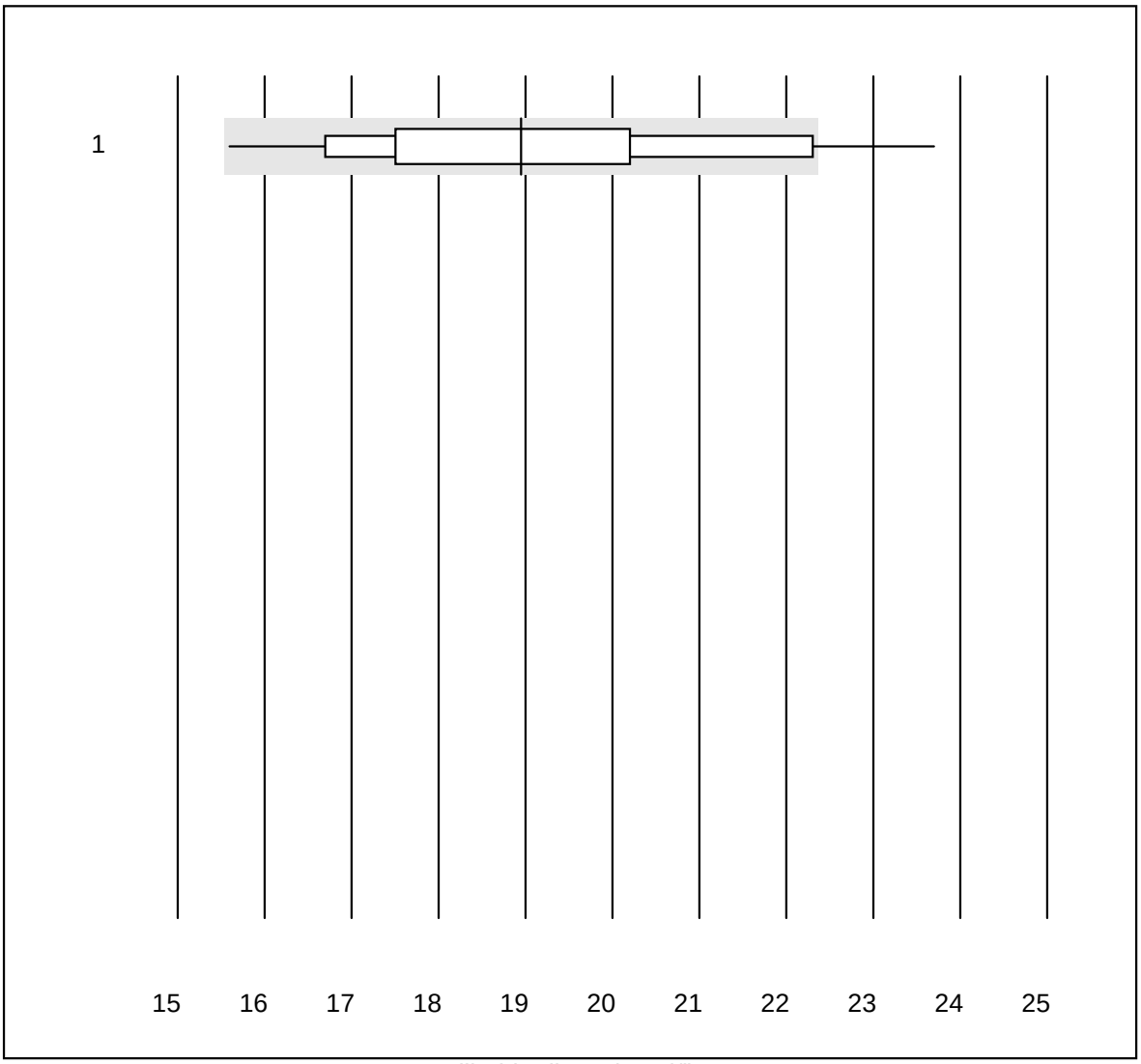


QUALAB tolerance : 18 %

Bilirubin (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	11	100.0	0.0	0.0	30.8	8.4	e*
2	Cobas	18	100.0	0.0	0.0	29.9	4.6	e
3	Reflotron	528	96.2	1.3	2.5	29.0	6.8	e
4	Fuji Dri-Chem	453	97.8	1.3	0.9	31.8	5.7	e
5	Spotchem/Ready	102	95.1	4.9	0.0	30.7	7.4	e
6	Spotchem D-Concept	90	97.8	0.0	2.2	26.5	4.2	e
7	Beckman/Olympus	5	100.0	0.0	0.0	33.7	1.9	e
8	Piccolo	17	100.0	0.0	0.0	34.5	2.3	e
9	Abx Mira	19	100.0	0.0	0.0	30.1	7.6	e
10	Hitachi S40/M40	8	75.0	12.5	12.5	34.5	8.2	e*

Bilirubin direct

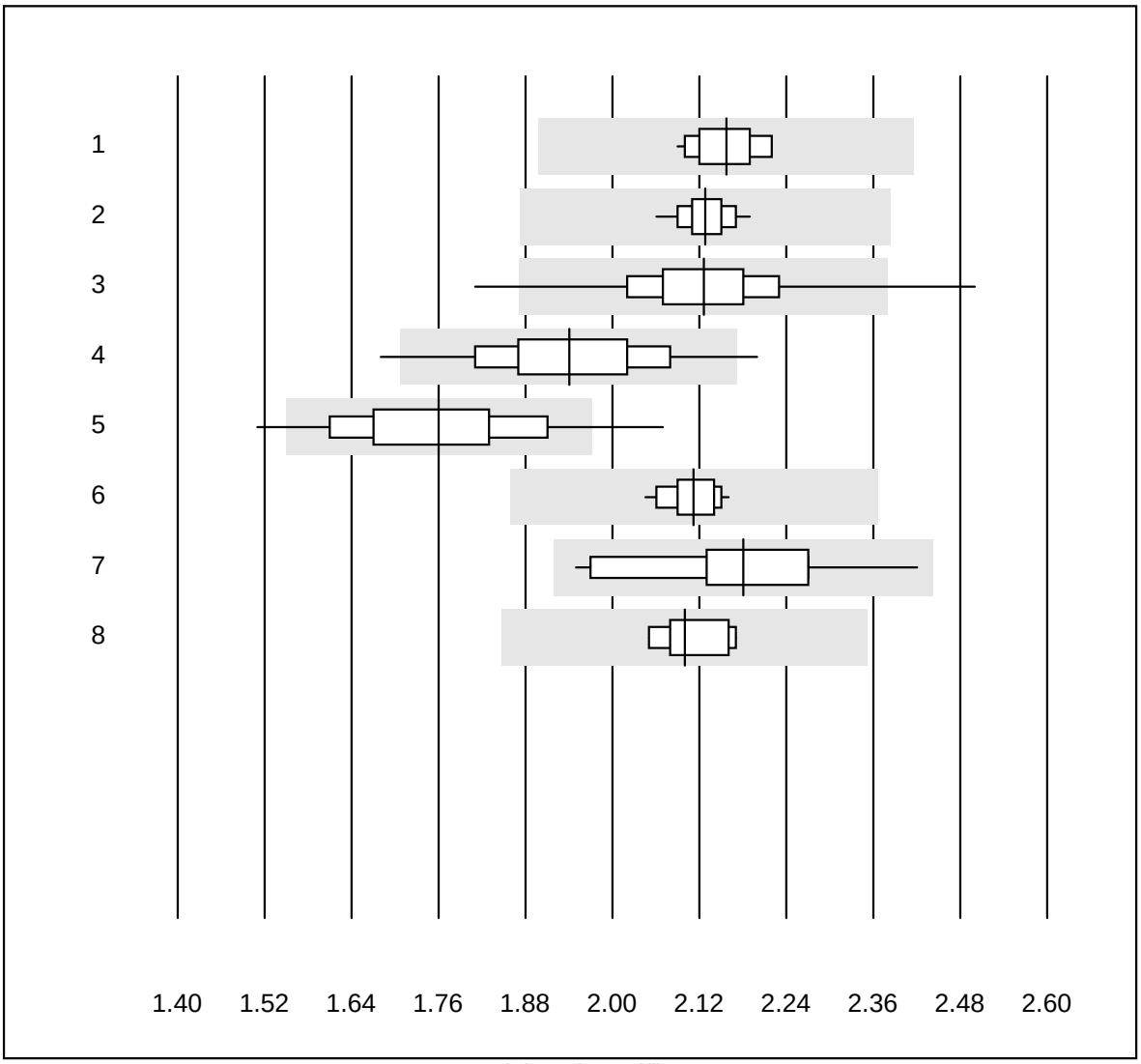


QUALAB tolerance : 18 %

Bilirubin direct (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Fuji Dri-Chem	30	83.3	6.7	10.0	19.0	10.4	e

Calcium

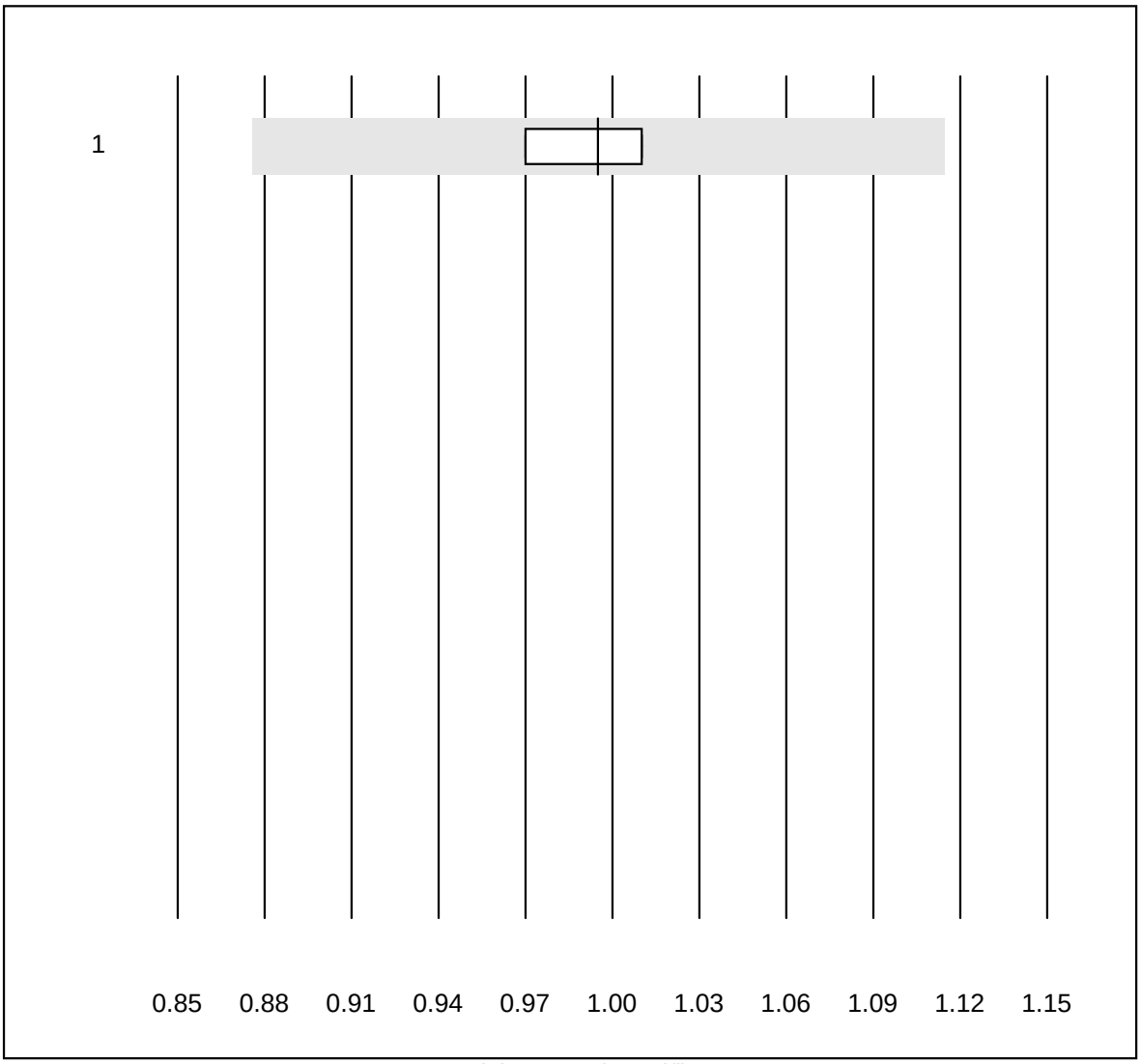


QUALAB tolerance : 12 %

Calcium (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	16	100.0	0.0	0.0	2.16	2.1	e
2	Cobas	13	100.0	0.0	0.0	2.13	1.7	e
3	Fuji Dri-Chem	323	97.9	1.2	0.9	2.13	4.2	e
4	Spotchem/Ready	49	93.9	4.1	2.0	1.94	5.5	e
5	Spotchem D-Concept	59	81.3	8.5	10.2	1.76	7.0	e
6	Piccolo	19	100.0	0.0	0.0	2.11	1.6	e
7	Abx Mira	13	100.0	0.0	0.0	2.18	5.7	e*
8	Hitachi S40/M40	5	100.0	0.0	0.0	2.10	2.4	e

Calcium ISE

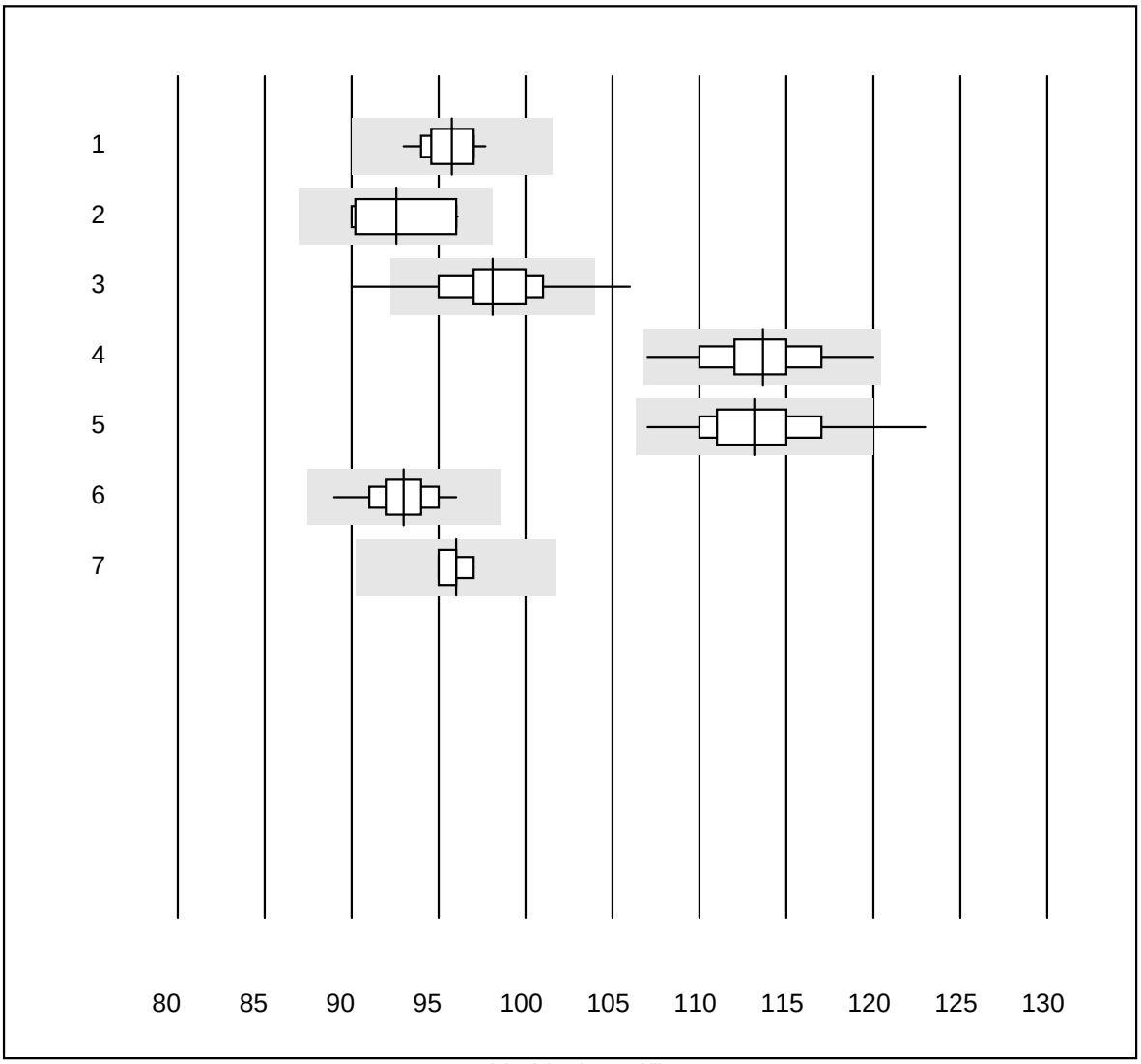


QUALAB tolerance : 12 %

Calcium ISE (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ISE	4	75.0	0.0	25.0	1.00	2.1	e

Chloride

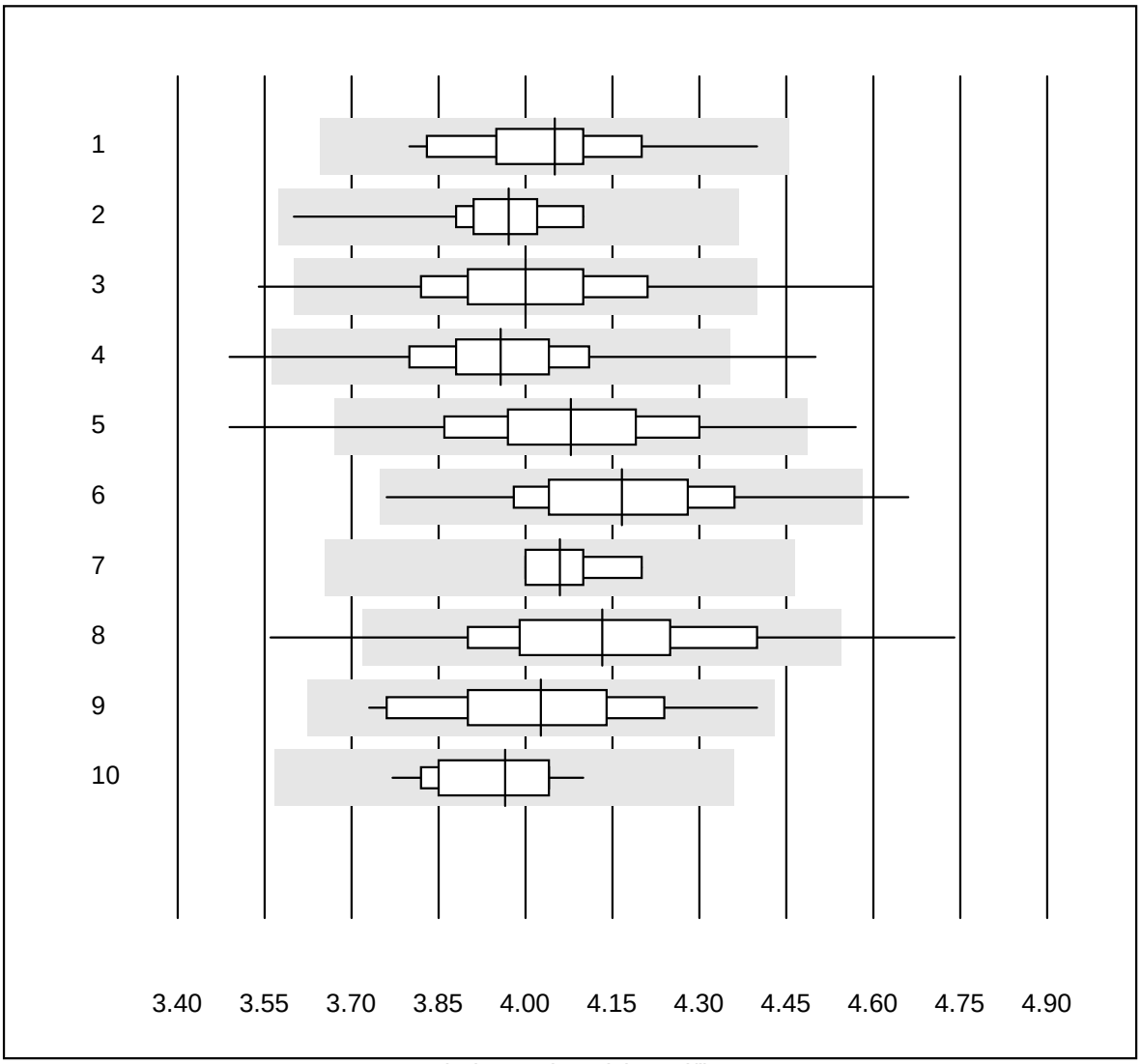


QUALAB tolerance : 6 %

Chloride (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ISE	12	91.7	0.0	8.3	96	1.5	e
2	Cobas	11	100.0	0.0	0.0	93	2.9	e*
3	Fuji Dri-Chem	530	96.2	2.3	1.5	98	2.3	e
4	Spotchem D-Concept	102	100.0	0.0	0.0	114	2.3	e
5	Spotchem EL-SE 1520	118	91.6	4.2	4.2	113	2.6	e
6	Piccolo	13	100.0	0.0	0.0	93	2.1	e
7	iStat Chem8	4	100.0	0.0	0.0	96	0.9	e

Cholesterol total

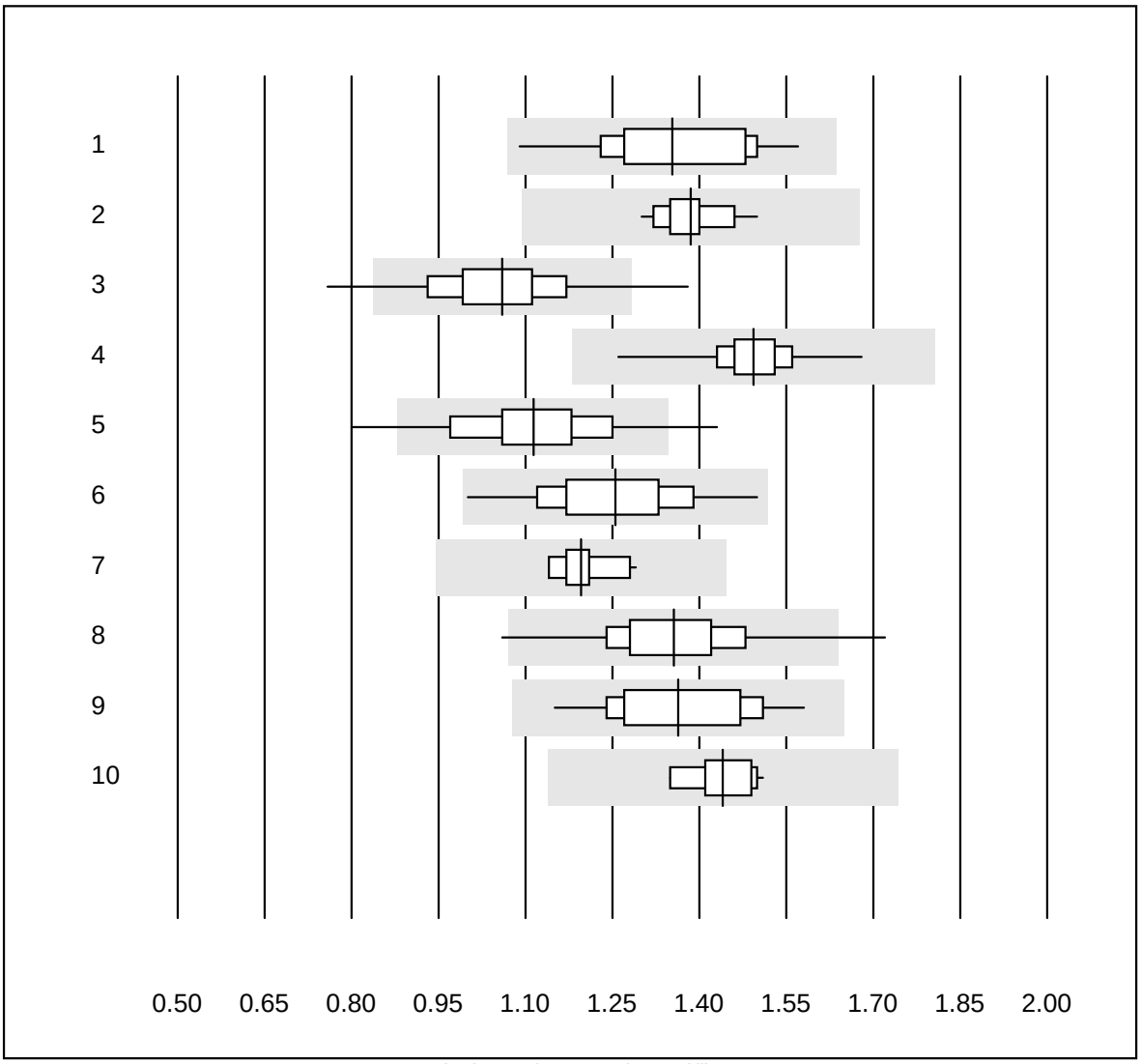


QUALAB tolerance : 10 %

Cholesterol total (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	17	94.1	0.0	5.9	4.1	3.7	e
2	Cobas	18	100.0	0.0	0.0	4.0	2.8	e
3	Reflotron	858	97.2	2.2	0.6	4.0	4.0	e
4	Fuji Dri-Chem	638	97.4	1.3	1.3	4.0	3.3	e
5	Spotchem/Ready	154	94.9	4.5	0.6	4.1	4.4	e
6	Spotchem D-Concept	116	98.2	0.9	0.9	4.2	3.9	e
7	Piccolo	17	100.0	0.0	0.0	4.1	1.8	e
8	Cholestech LDX	191	92.7	6.8	0.5	4.1	4.9	e
9	Abx Mira	19	100.0	0.0	0.0	4.0	4.2	e
10	Hitachi S40/M40	11	100.0	0.0	0.0	4.0	2.7	e

Cholesterin HDL

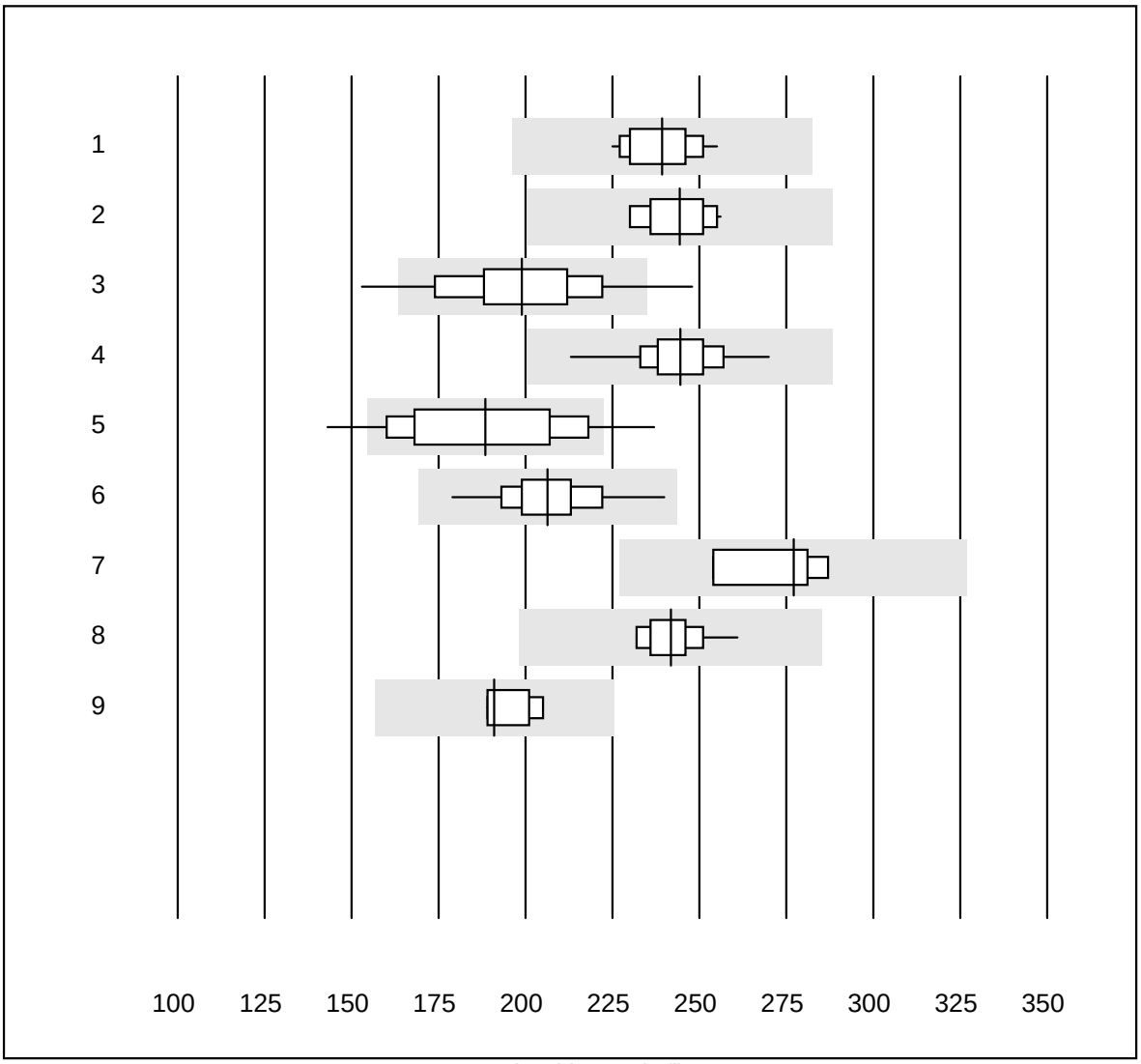


QUALAB tolerance : 21 %

Cholesterin HDL (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Wet chemistry, direc	15	100.0	0.0	0.0	1.35	9.3	e
2	Cobas	16	100.0	0.0	0.0	1.39	3.8	e
3	Reflotron	646	91.8	3.6	4.6	1.06	9.3	e
4	Fuji Dri-Chem	596	100.0	0.0	0.0	1.49	3.4	e
5	Spotchem/Ready	140	92.9	5.0	2.1	1.11	9.8	e
6	Spotchem D-Concept	114	100.0	0.0	0.0	1.25	8.0	e
7	Piccolo	17	100.0	0.0	0.0	1.20	3.8	e
8	Cholestech LDX	192	94.8	2.6	2.6	1.36	7.9	e
9	Abx Mira	18	100.0	0.0	0.0	1.36	8.2	e
10	Hitachi S40/M40	10	100.0	0.0	0.0	1.44	3.9	e

Creatine kinase

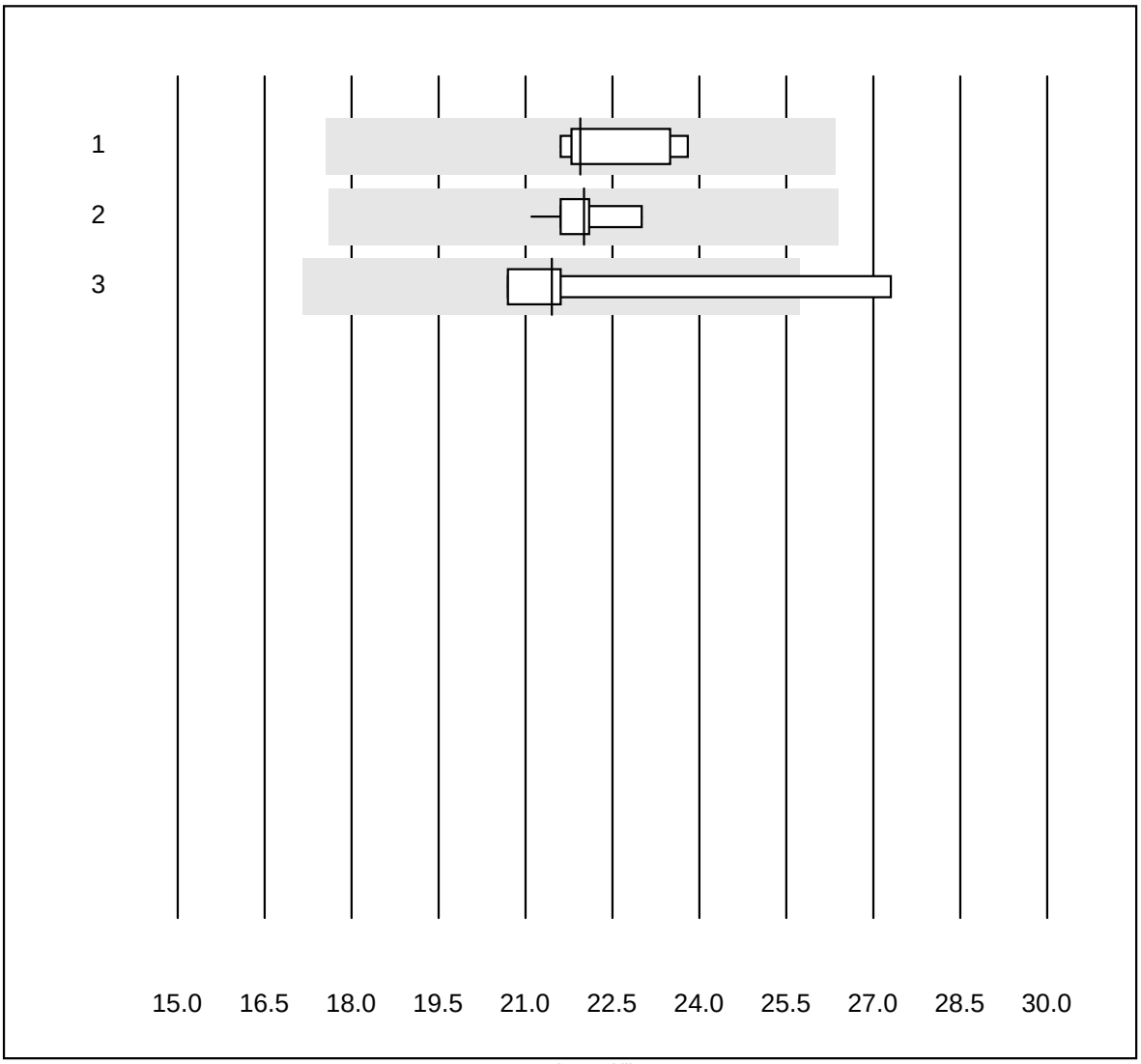


QUALAB tolerance : 18 %

Creatine kinase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC/SGKC 37'C	16	100.0	0.0	0.0	239	3.9	e
2	Cobas	15	100.0	0.0	0.0	244	3.6	e
3	Reflotron	446	92.9	4.9	2.2	199	9.1	e
4	Fuji Dri-Chem	388	97.2	0.0	2.8	245	3.8	e
5	Spotchem/Ready	60	83.3	10.0	6.7	188	12.6	e
6	Spotchem D-Concept	71	100.0	0.0	0.0	206	5.7	e
7	Piccolo	4	100.0	0.0	0.0	277	5.3	e*
8	Abx Mira	15	100.0	0.0	0.0	242	3.2	e
9	Hitachi S40/M40	5	80.0	0.0	20.0	191	3.9	e

Iron

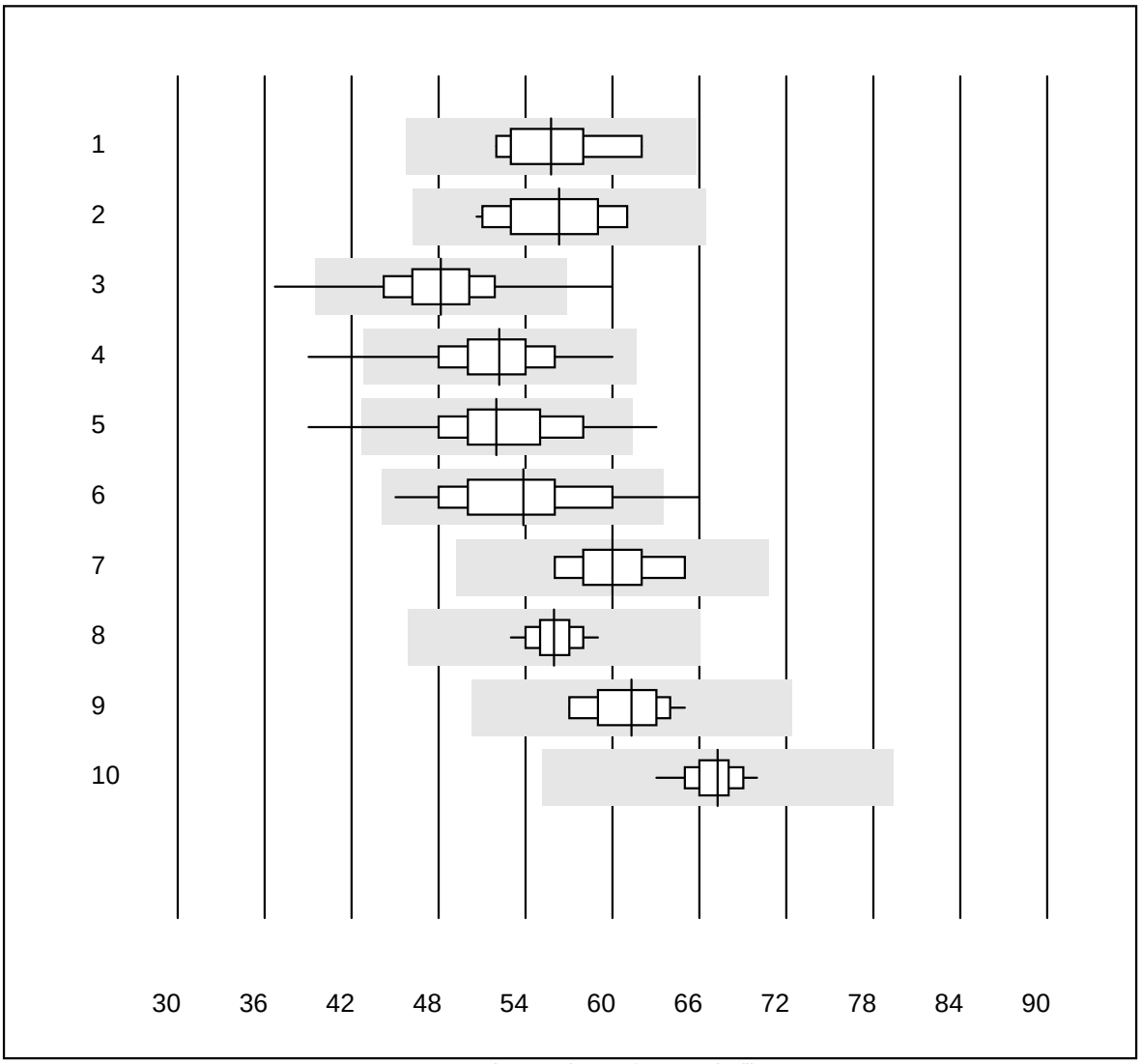


QUALAB tolerance : 20 %

Iron (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	6	100.0	0.0	0.0	22	4.3	e
2	Cobas	11	100.0	0.0	0.0	22	2.6	e
3	Abx Mira	4	75.0	25.0	0.0	21	13.5	e*

Gamma-glutamyltransferase

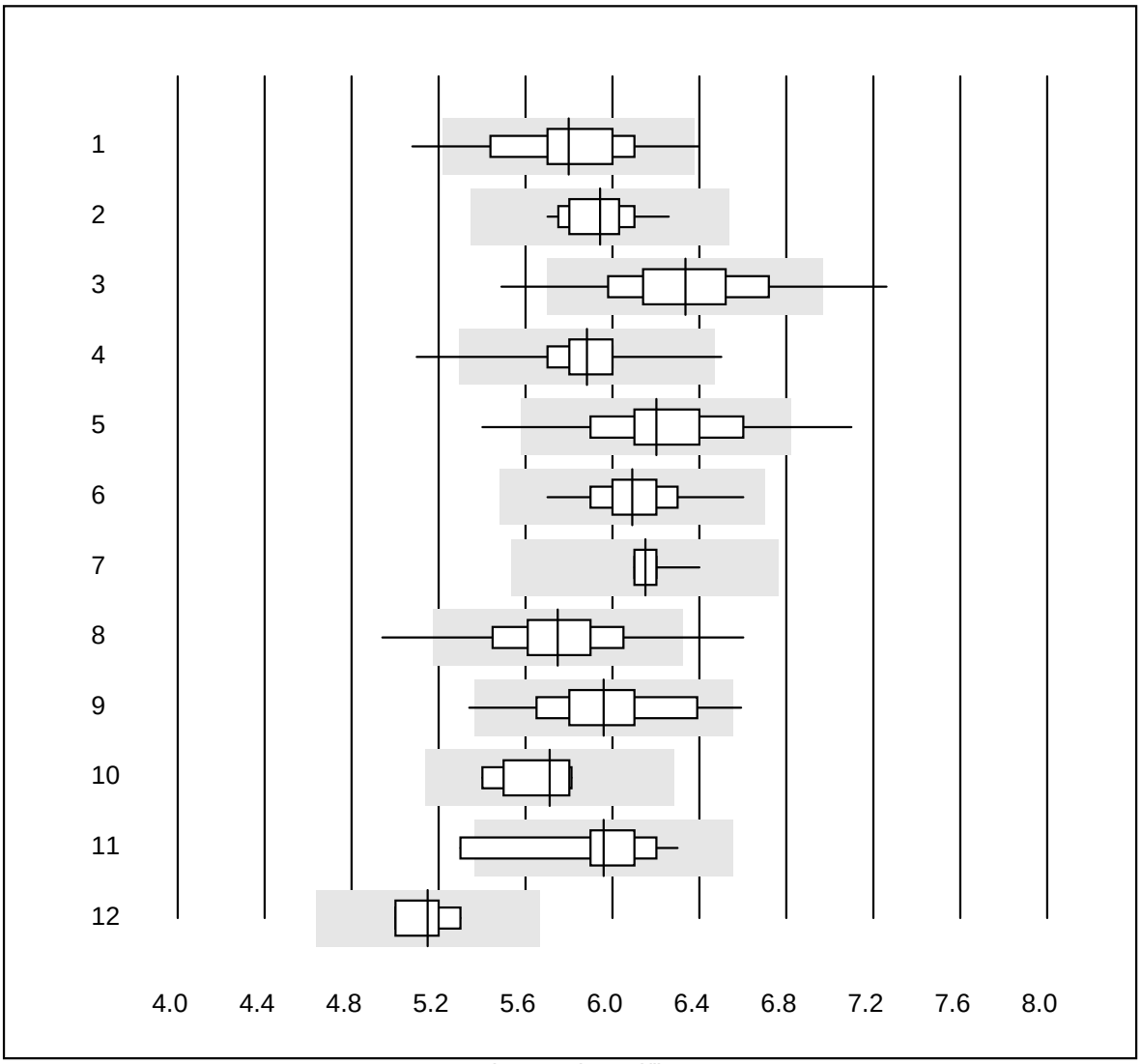


QUALAB tolerance : 18 %

Gamma-glutamyltransferase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC/SGKC 37'C	6	100.0	0.0	0.0	56	6.7	e*
2	Cobas	17	100.0	0.0	0.0	56	6.4	e
3	Reflotron	931	97.6	1.4	1.0	48	6.5	e
4	Fuji Dri-Chem	663	99.1	0.3	0.6	52	5.6	e
5	Spotchem/Ready	157	98.1	1.9	0.0	52	7.4	e
6	Spotchem D-Concept	123	95.1	4.1	0.8	54	8.5	e
7	DGKC 37'C	9	100.0	0.0	0.0	60	5.1	e
8	Piccolo	21	100.0	0.0	0.0	56	2.6	e
9	Abx Mira	20	100.0	0.0	0.0	61	4.0	e
10	Hitachi S40/M40	12	100.0	0.0	0.0	67	2.8	e

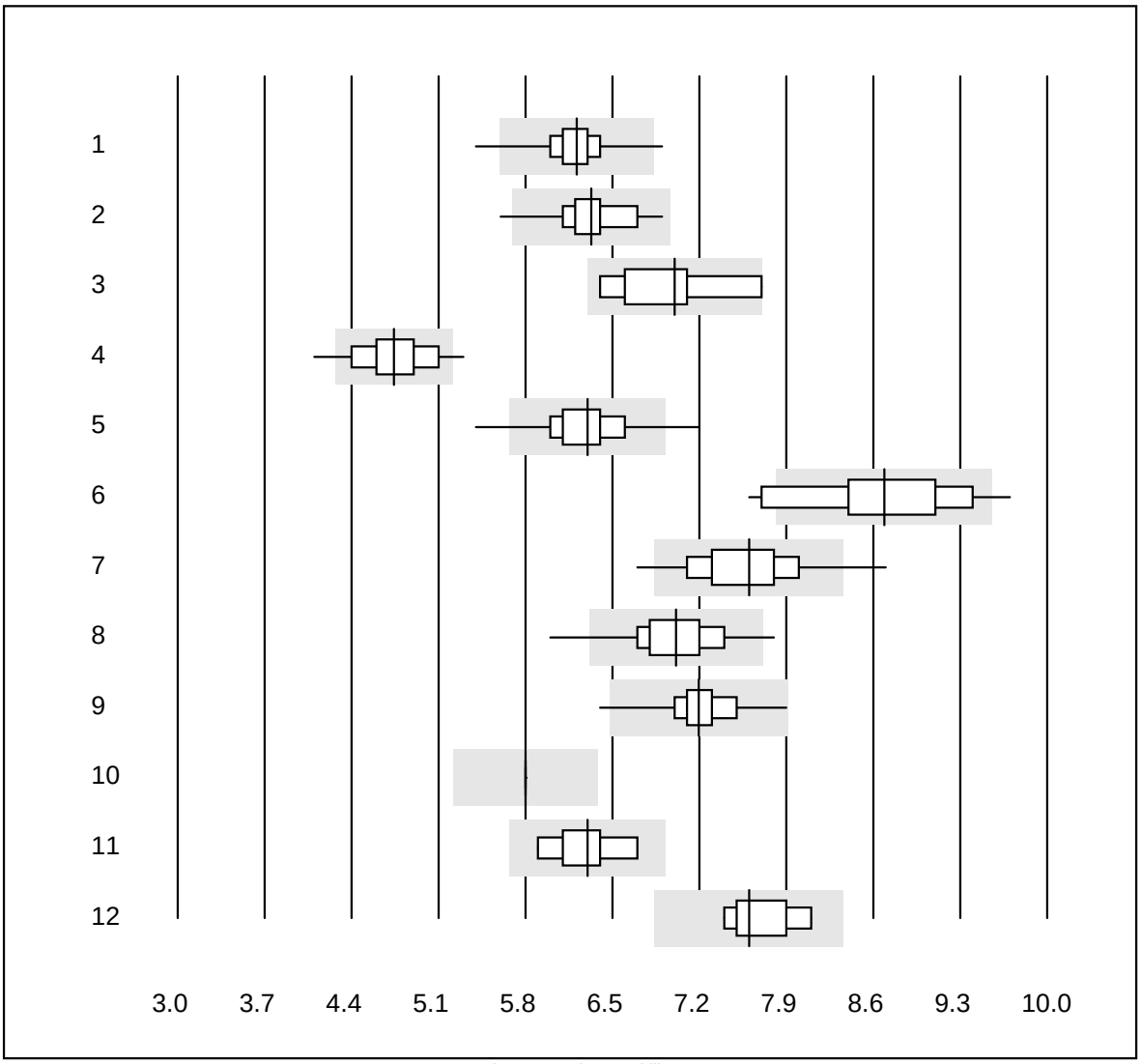
Glucose



QUALAB tolerance : 10 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	28	82.2	10.7	7.1	5.8	5.0	e
2	Cobas	18	100.0	0.0	0.0	5.9	2.4	e
3	Reflotron	957	93.2	4.5	2.3	6.3	4.7	e
4	Fuji Dri-Chem	628	98.6	0.6	0.8	5.9	2.5	e
5	Spotchem/Ready	143	95.1	2.8	2.1	6.2	4.5	e
6	Spotchem D-Concept	115	100.0	0.0	0.0	6.1	3.0	e
7	Piccolo	23	100.0	0.0	0.0	6.2	1.2	e
8	Cholestech LDX	155	94.9	3.2	1.9	5.7	4.5	e
9	Abx Mira	19	89.5	10.5	0.0	6.0	4.8	e
10	Lange	7	100.0	0.0	0.0	5.7	2.9	e
11	Hitachi S40/M40	11	81.8	9.1	9.1	6.0	4.6	e*
12	iStat Chem8	4	100.0	0.0	0.0	5.2	2.5	e*

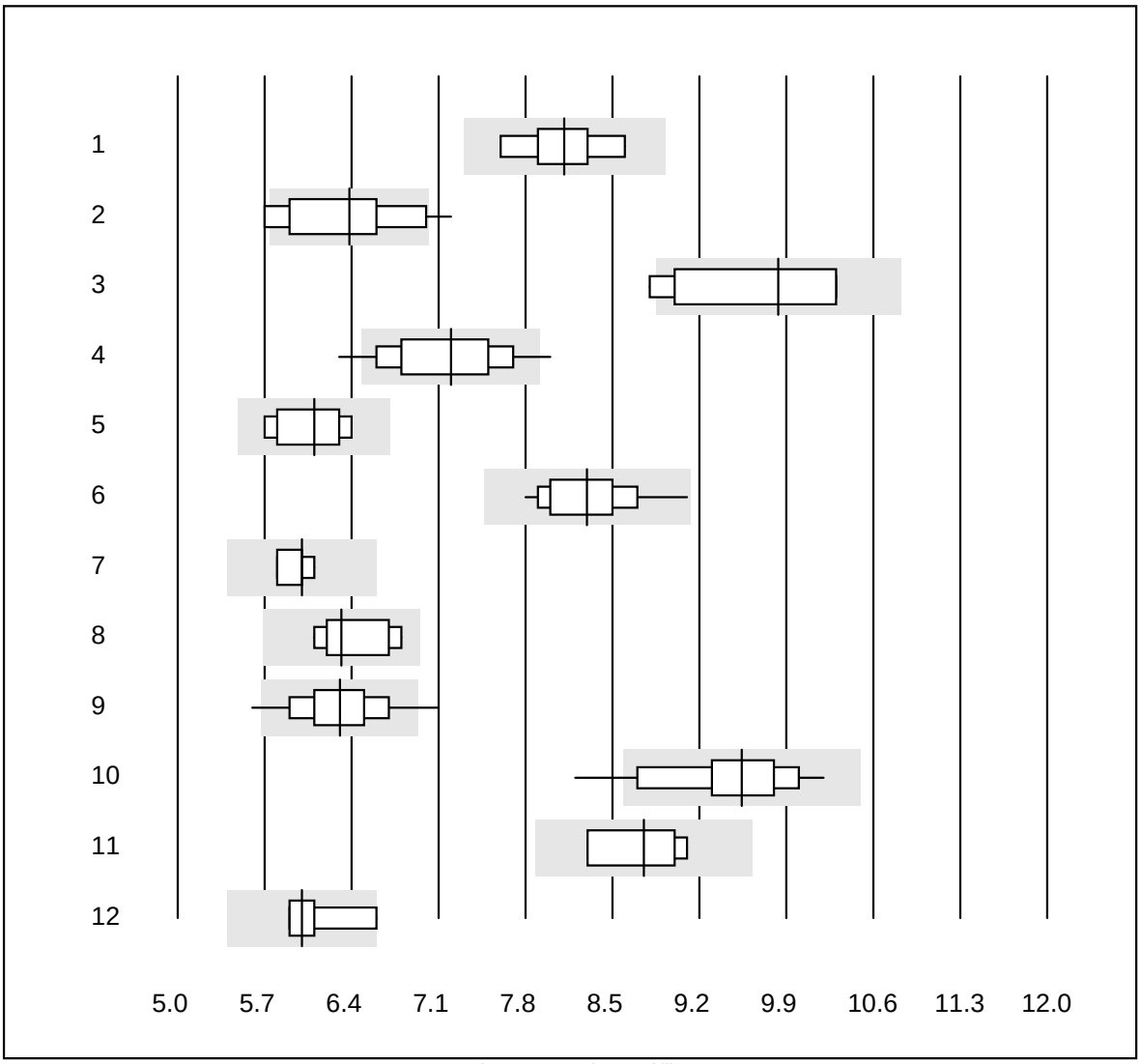
Glucose



QUALAB tolerance : 10 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Accu-Chek Aviva	340	92.3	1.5	6.2	6.2	3.3	e
2	Accu-Chek Inform 2	208	99.5	0.5	0.0	6.3	3.6	e
3	Accu-Chek Mobile	5	80.0	20.0	0.0	7.0	7.2	e*
4	Bayer Contour 2 (5s)	84	72.6	3.6	23.8	4.7	5.7	e
5	Bayer Contour XT/NEX	1032	95.1	3.3	1.6	6.3	4.3	e
6	Bayer Breeze 2	19	78.9	21.1	0.0	8.7	6.6	e*
7	Hemocue (Plasma)	60	91.7	5.0	3.3	7.6	4.9	e
8	mylife Pura	51	90.2	5.9	3.9	7.0	4.5	e
9	Hemocue RT	20	90.0	5.0	5.0	7.2	3.9	e
10	Freestyle precision/	4	50.0	0.0	50.0	5.8	0.0	e
11	Freestyle Freedom li	9	100.0	0.0	0.0	6.3	3.9	e*
12	Sanofi BG Star	7	100.0	0.0	0.0	7.6	3.2	e*

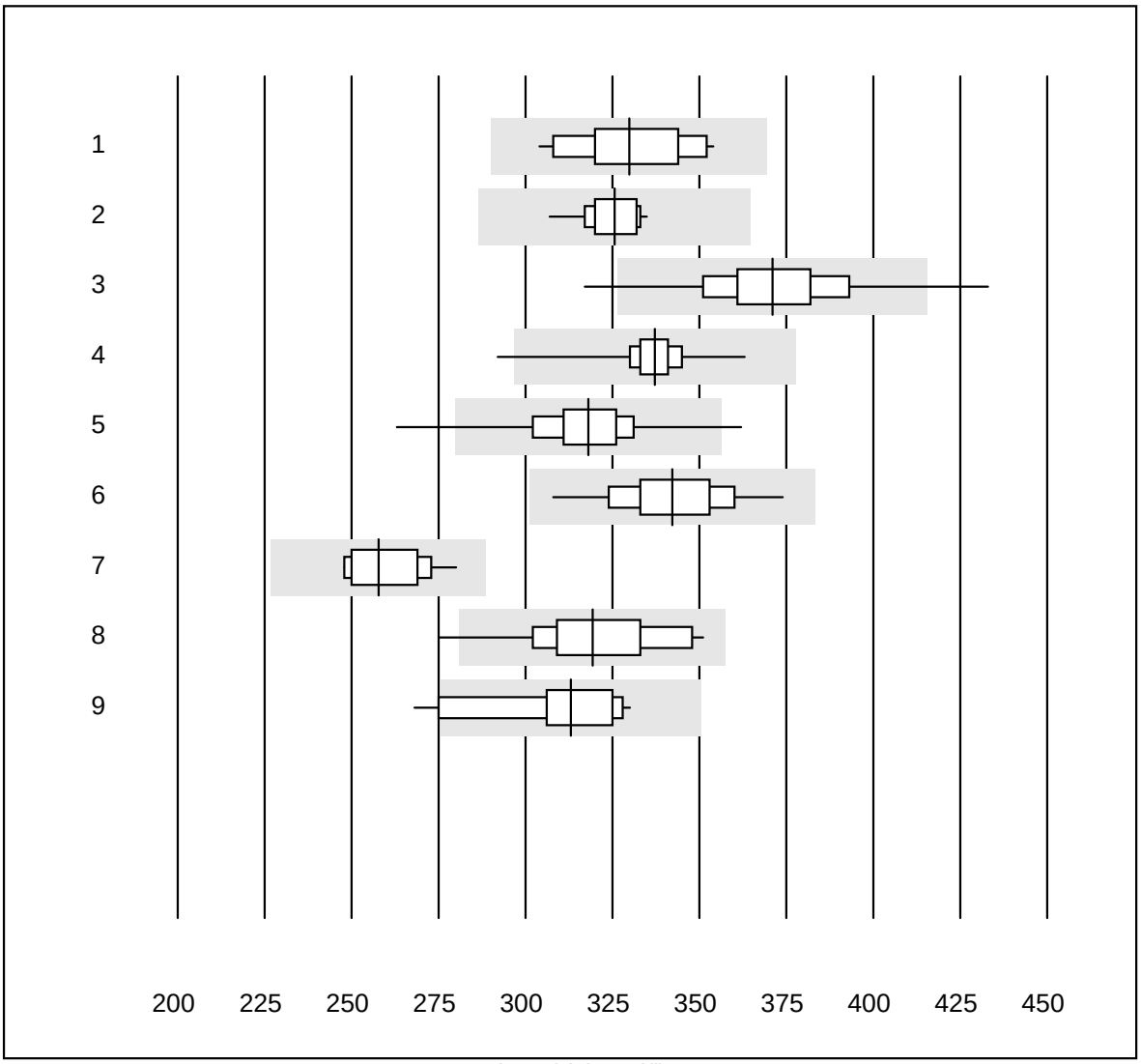
Glucose B



QUALAB tolerance : 10 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Glucocard	10	90.0	0.0	10.0	8.1	4.2	e*
2	Bayer Elite	10	80.0	20.0	0.0	6.4	7.5	e*
3	Omnitest	11	63.6	9.1	27.3	9.8	6.1	e*
4	Hemocue	73	89.0	9.6	1.4	7.2	6.1	e
5	AccuChek Sensor	7	85.7	0.0	14.3	6.1	4.5	e*
6	OneTouch Ultra	25	100.0	0.0	0.0	8.3	4.0	e
7	OneTouch Verio	4	100.0	0.0	0.0	6.0	2.1	e
8	AccuChek Compact	6	100.0	0.0	0.0	6.3	4.5	e*
9	Bayer Contour (15s)	96	94.8	4.2	1.0	6.3	5.1	e
10	Healthpro	17	88.2	5.9	5.9	9.5	5.6	e*
11	Alpha Check	4	100.0	0.0	0.0	8.8	4.4	e*
12	Mylife UNIO	4	75.0	25.0	0.0	6.0	5.4	e*

Uric Acid

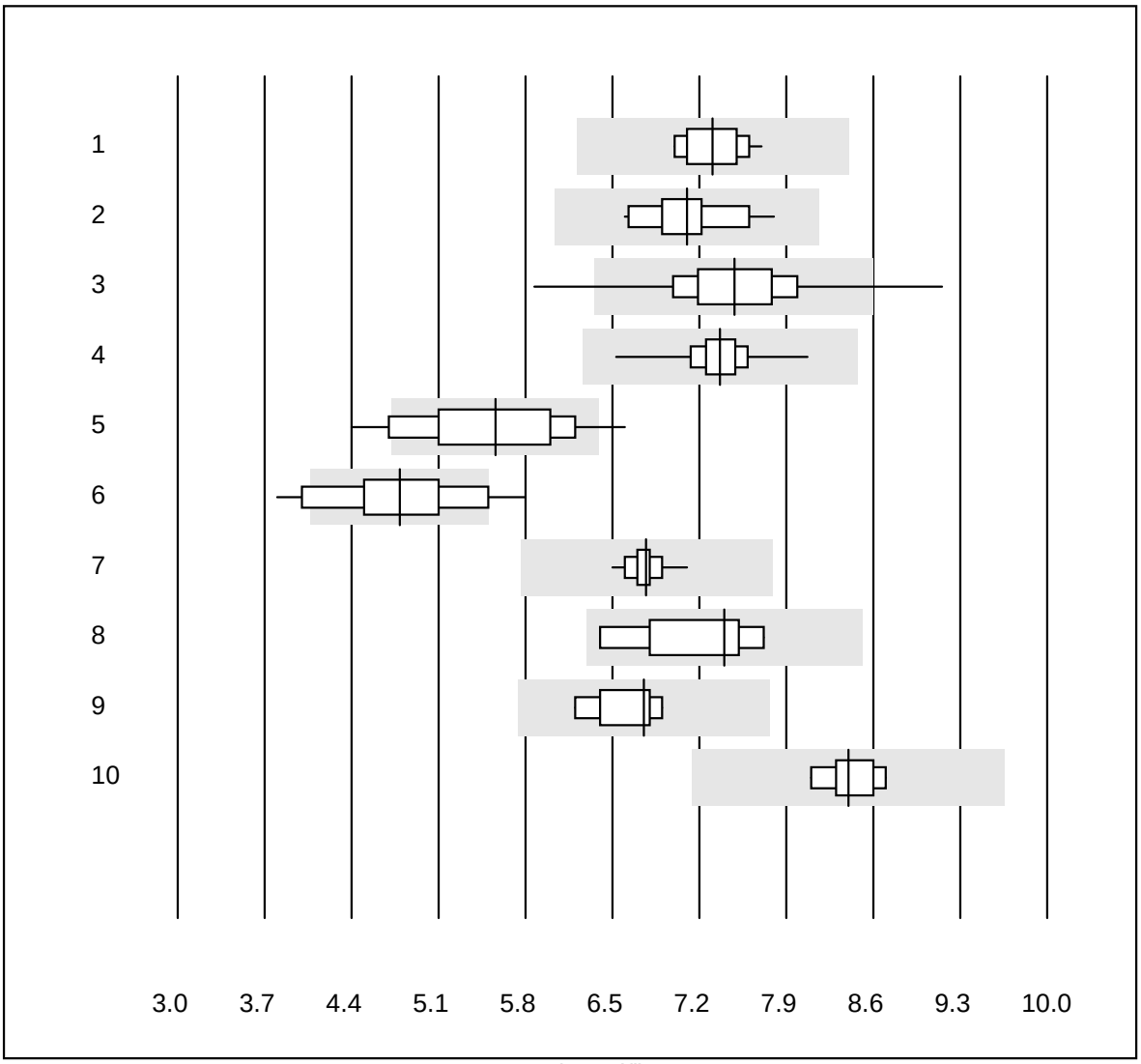


QUALAB tolerance : 12 %

Uric Acid (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	18	100.0	0.0	0.0	330	4.7	e
2	Cobas	14	100.0	0.0	0.0	326	2.4	e
3	Reflotron	830	97.6	0.8	1.6	371	4.5	e
4	Fuji Dri-Chem	624	99.1	0.3	0.6	337	2.0	e
5	Spotchem/Ready	130	97.7	1.5	0.8	318	4.2	e
6	Spotchem D-Concept	113	99.1	0.0	0.9	342	4.0	e
7	Piccolo	16	93.7	0.0	6.3	258	4.0	e
8	Abx Mira	18	94.4	5.6	0.0	319	5.9	e
9	Hitachi S40/M40	11	81.8	18.2	0.0	313	6.9	e*

Urea

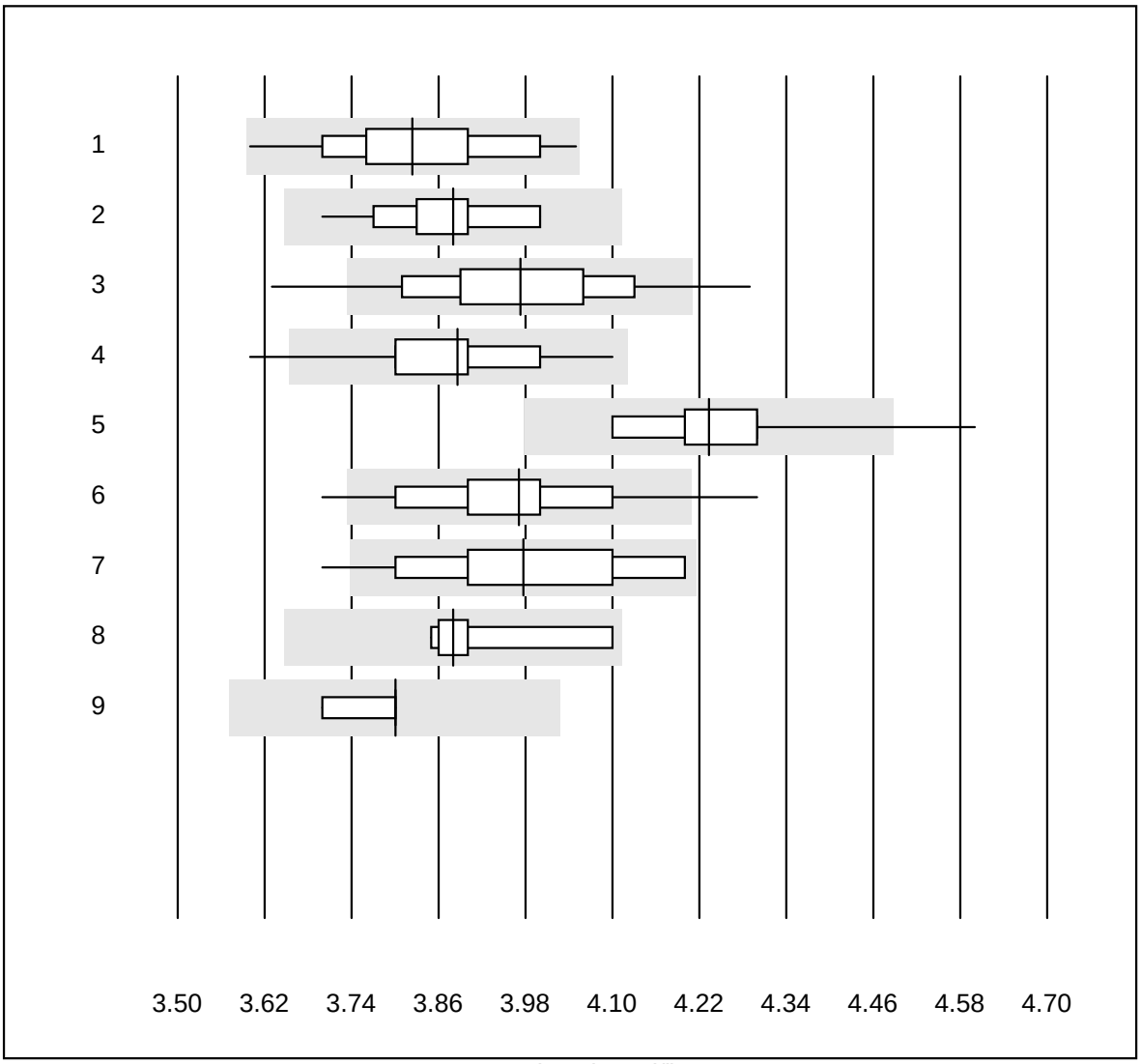


QUALAB tolerance : 15 %

Urea (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	15	100.0	0.0	0.0	7.3	3.1	e
2	Cobas	17	100.0	0.0	0.0	7.1	4.5	e
3	Reflotron	366	93.7	2.5	3.8	7.5	6.1	e
4	Fuji Dri-Chem	390	99.2	0.0	0.8	7.4	2.6	e
5	Spotchem/Ready	92	55.5	13.0	31.5	5.6	10.6	e
6	Spotchem D-Concept	72	57.0	11.1	31.9	4.8	10.8	e
7	Piccolo	22	100.0	0.0	0.0	6.8	2.2	e
8	Abx Mira	9	100.0	0.0	0.0	7.4	6.4	e*
9	Hitachi S40/M40	8	100.0	0.0	0.0	6.8	3.8	e
10	iStat Chem8	5	100.0	0.0	0.0	8.4	2.8	e

Potassium

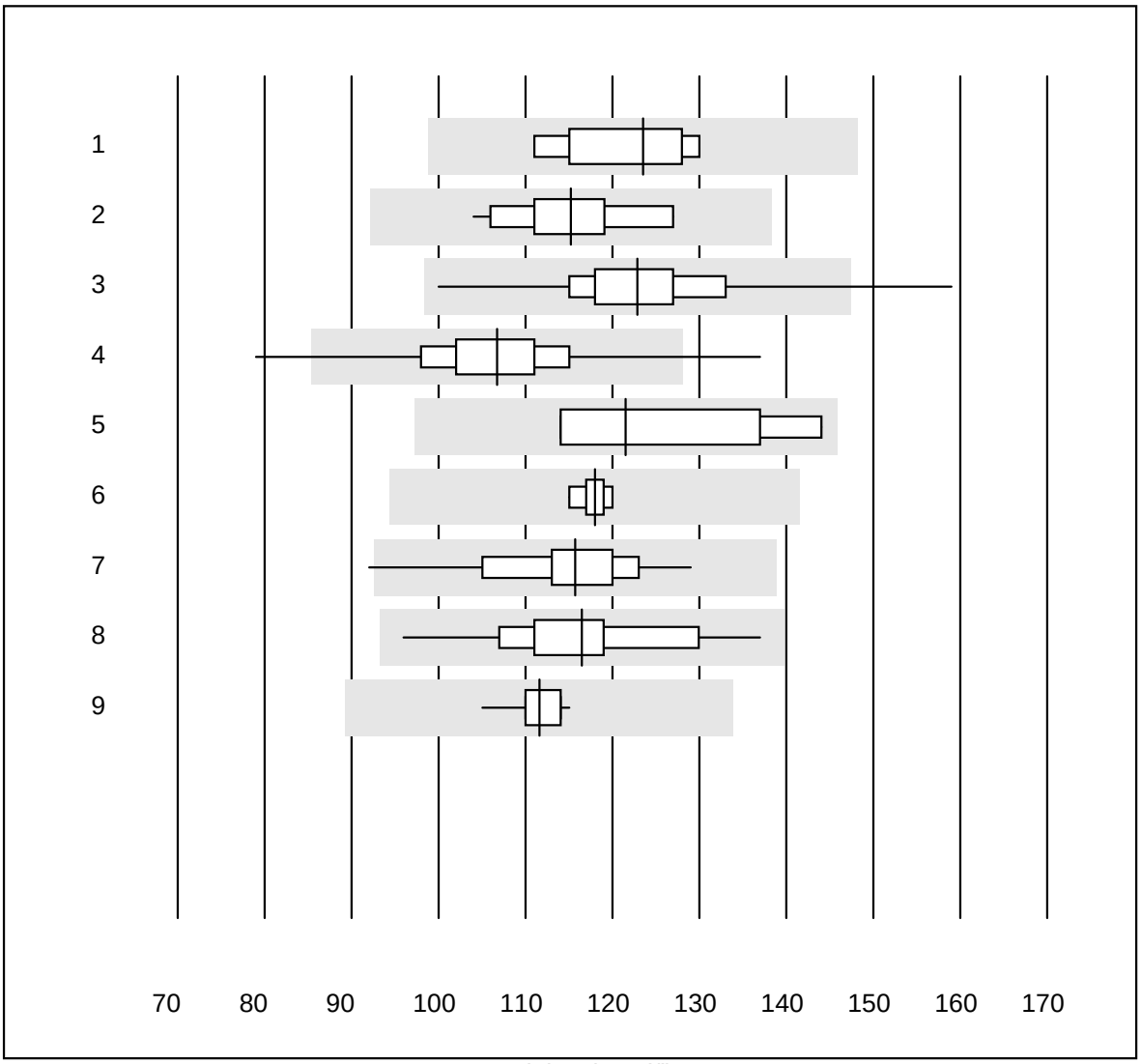


QUALAB tolerance : 6 %

Potassium (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ISE	23	100.0	0.0	0.0	3.82	2.9	e
2	Cobas	18	100.0	0.0	0.0	3.88	2.0	e
3	Reflotron	866	90.0	5.5	4.5	3.97	3.1	e
4	Fuji Dri-Chem	657	97.3	0.9	1.8	3.89	2.0	e
5	Spotchem D-Concept	114	97.3	1.8	0.9	4.23	2.0	e
6	Spotchem EL-SE 1520	122	95.1	1.6	3.3	3.97	2.6	e
7	Piccolo	14	85.8	7.1	7.1	3.98	4.1	e*
8	Abx Mira	5	100.0	0.0	0.0	3.88	2.6	e*
9	iStat Chem8	5	100.0	0.0	0.0	3.80	1.2	e

Creatinine

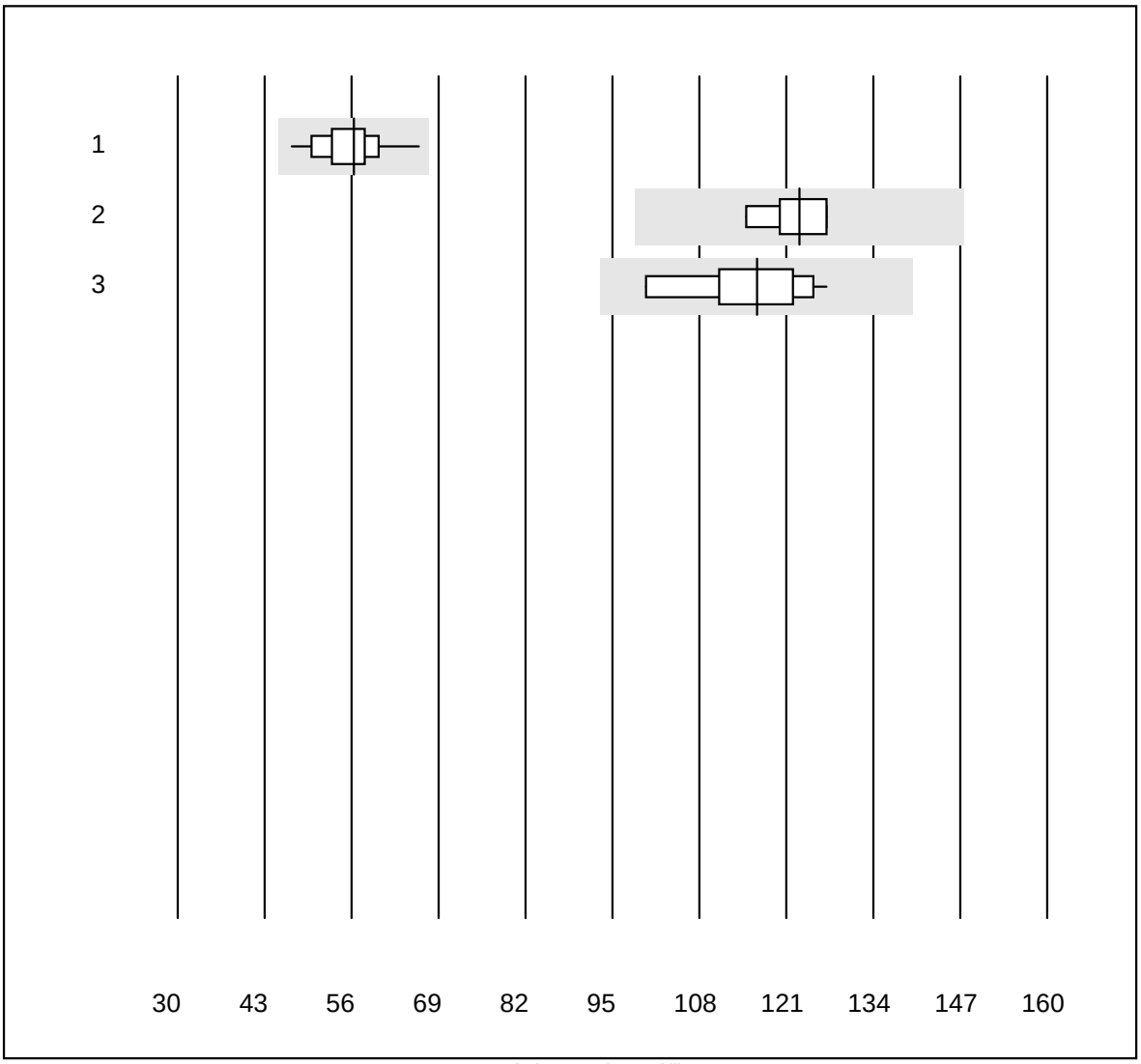


QUALAB tolerance : 20 %

Creatinine (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	8	100.0	0.0	0.0	124	5.6	e
2	Cobas	19	100.0	0.0	0.0	115	5.7	e
3	Reflotron	1040	98.2	1.0	0.8	123	6.2	e
4	Fuji Dri-Chem	692	96.5	1.3	2.2	107	6.7	e
5	Jaffé	8	87.5	0.0	12.5	122	9.3	e*
6	Enzymatic	5	100.0	0.0	0.0	118	1.6	e
7	Piccolo	22	95.5	4.5	0.0	116	7.0	e
8	Abx Mira	21	100.0	0.0	0.0	116	8.2	e
9	Hitachi S40/M40	11	100.0	0.0	0.0	112	2.5	e

Creatinine E

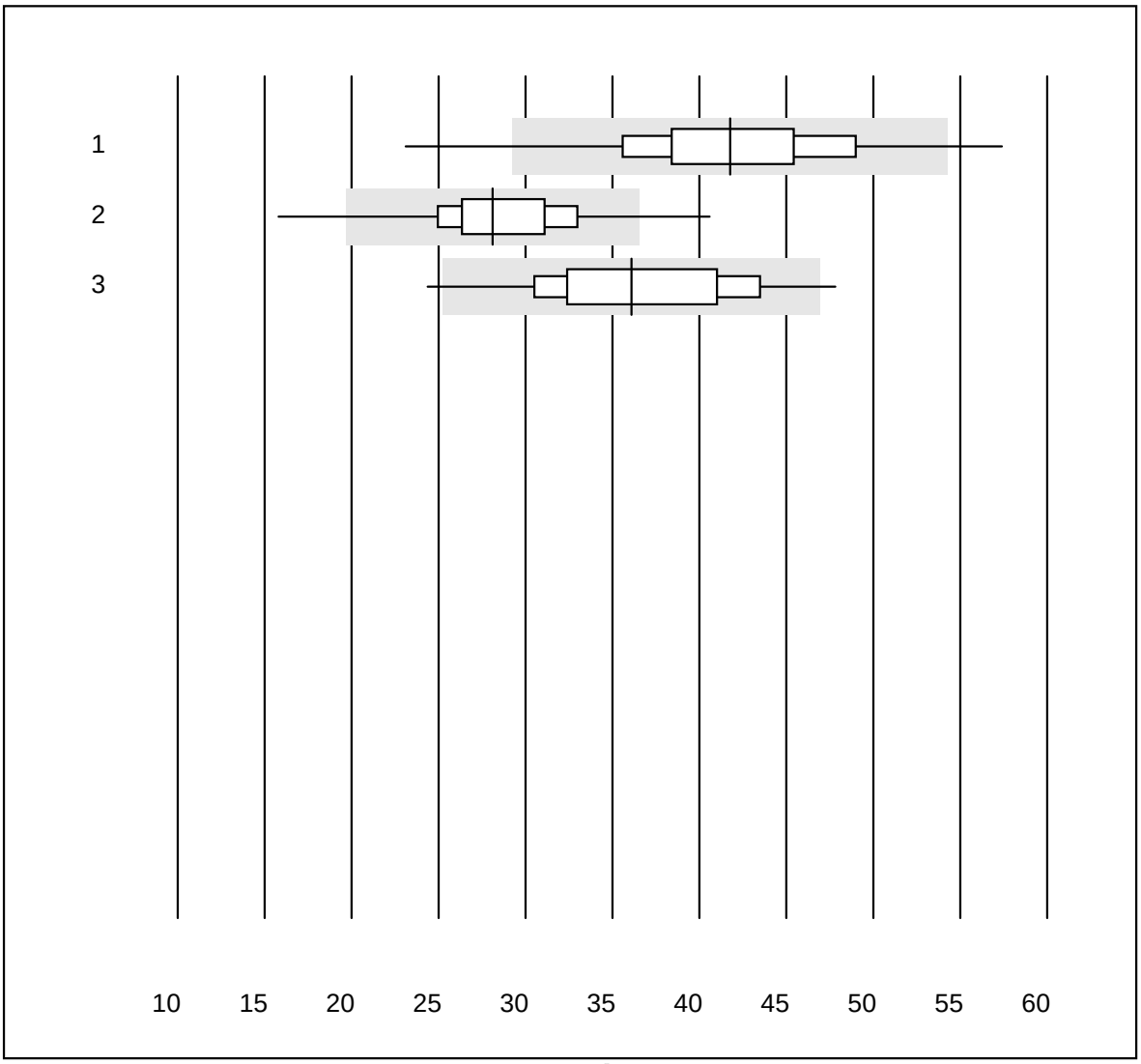


QUALAB tolerance : 20 %

Creatinine E (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Statsensor i / Nova	22	90.9	0.0	9.1	56	8.2	e
2	iStat Chem8	6	100.0	0.0	0.0	123	3.7	e
3	ABL700/800 Radiomete	10	100.0	0.0	0.0	117	7.0	e

eGFR

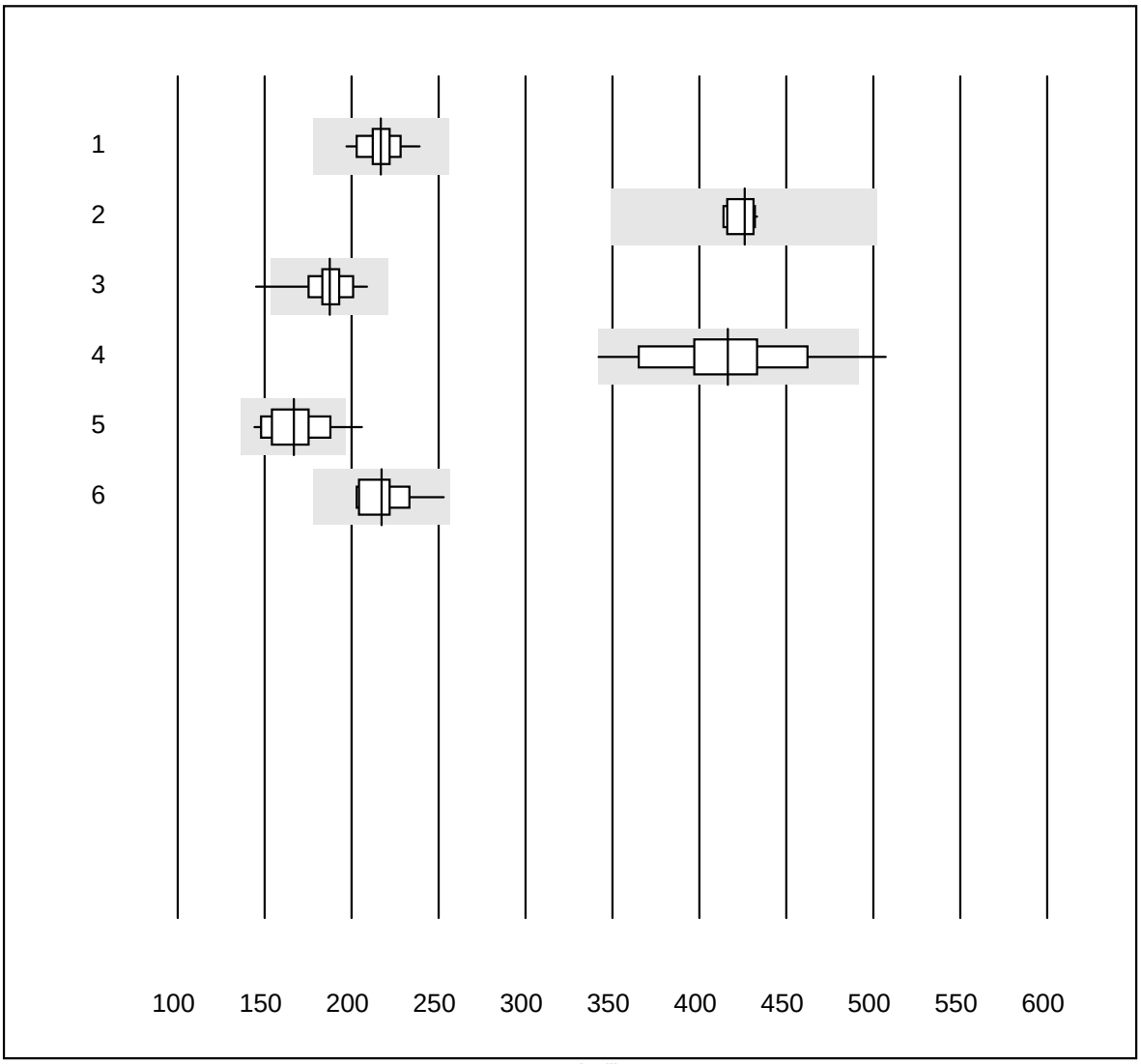


QUALAB tolerance : 20 %

eGFR ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CKD-EPI	743	93.1	3.5	3.4	42	13.2	a
2	Cockcroft-Gault	48	81.3	10.4	8.3	28	15.5	a
3	MDRD	21	90.5	9.5	0.0	36	15.7	a

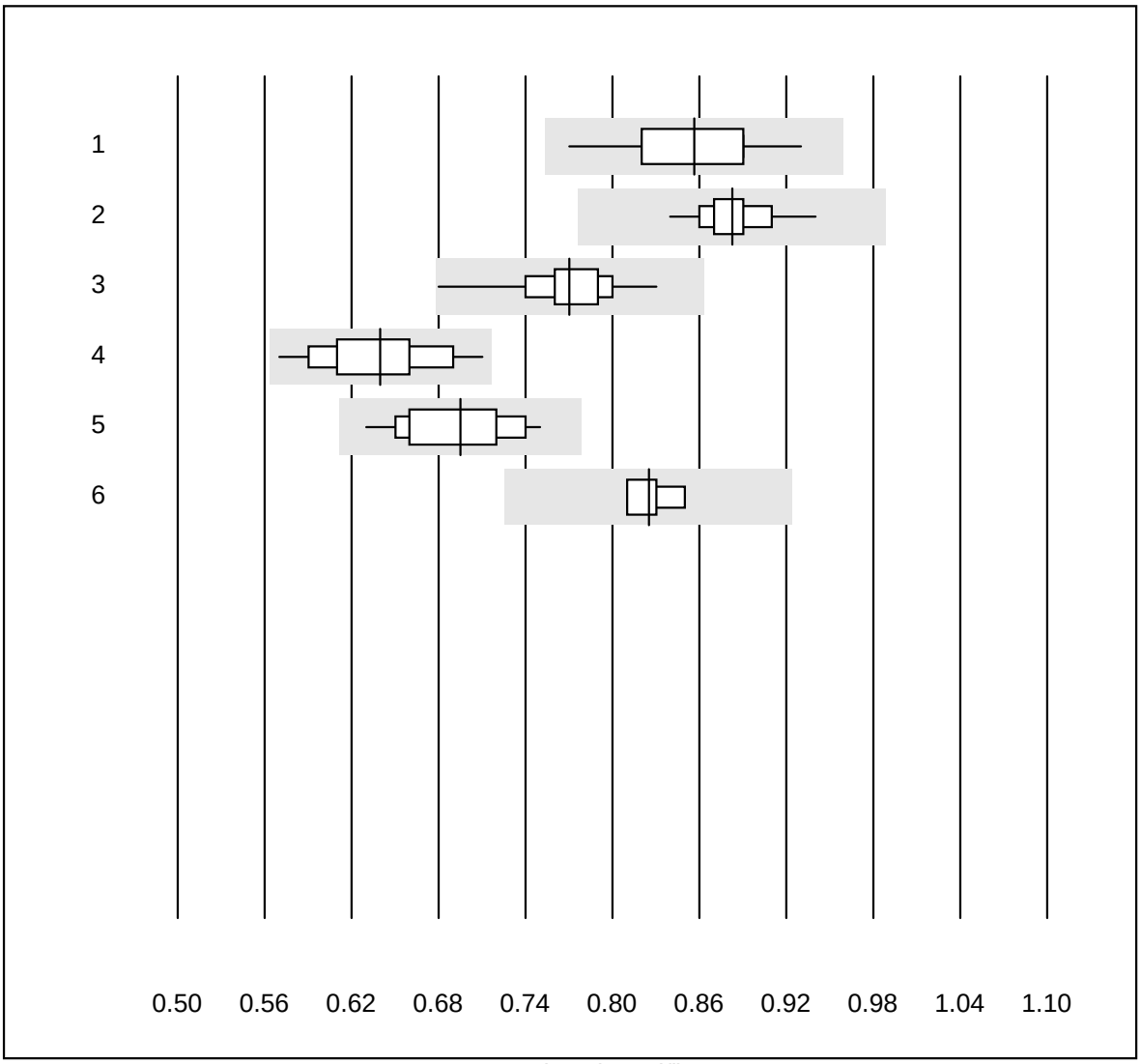
LDH



QUALAB tolerance : 18 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC	17	100.0	0.0	0.0	217	4.6	e
2	Cobas	10	100.0	0.0	0.0	426	1.8	e
3	Fuji Dri-Chem	137	97.8	1.5	0.7	187	5.4	e
4	Spotchem/Ready	39	94.8	2.6	2.6	417	8.2	e
5	Spotchem D-Concept	35	97.1	2.9	0.0	167	8.7	e
6	Abx Mira	10	100.0	0.0	0.0	217	7.1	e*

Magnesium

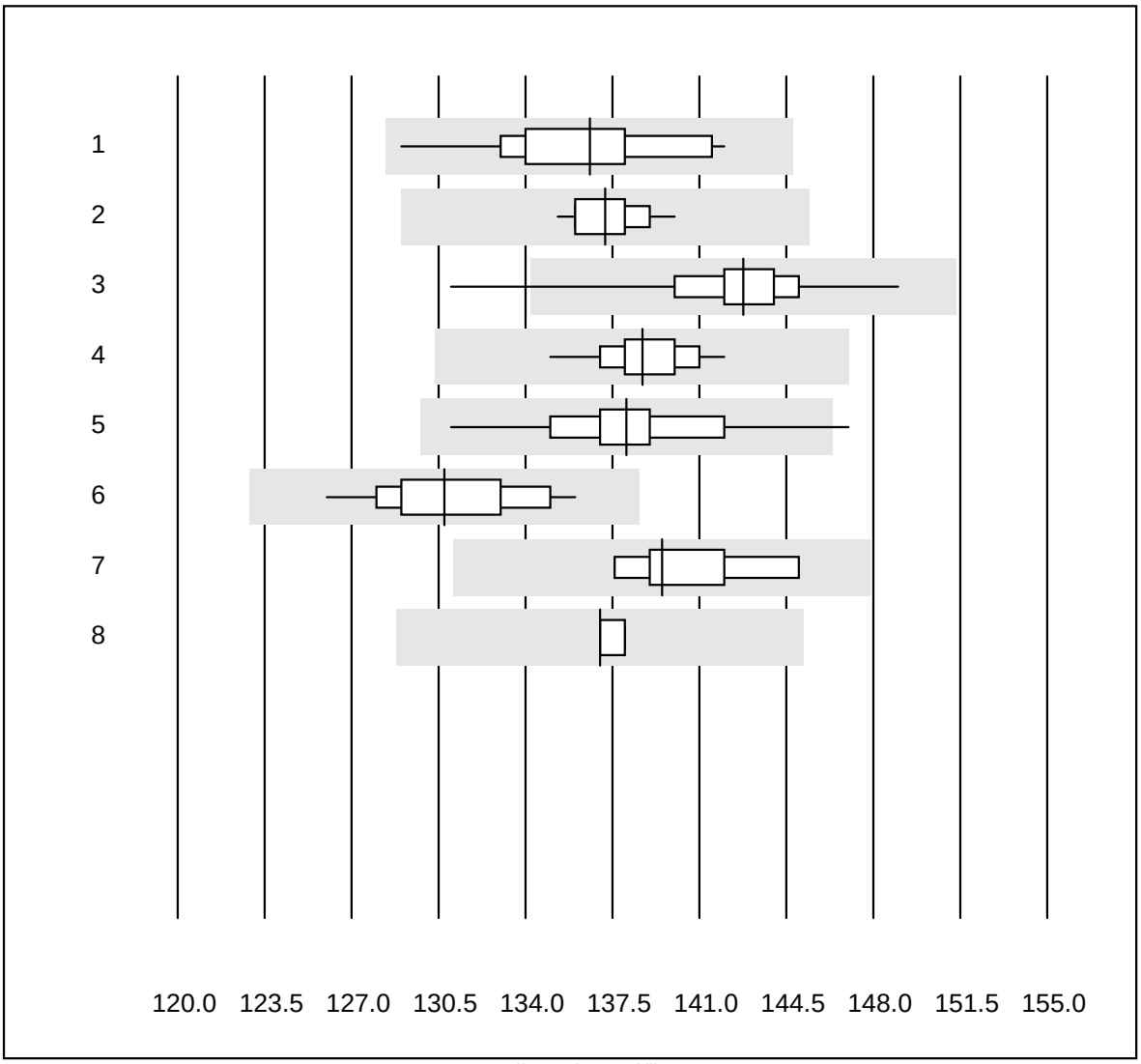


QUALAB tolerance : 12 %

Magnesium (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	11	100.0	0.0	0.0	0.86	5.1	e*
2	Cobas	12	100.0	0.0	0.0	0.88	2.9	e
3	Fuji Dri-Chem	110	99.1	0.0	0.9	0.77	3.7	e
4	Spotchem D-Concept	23	100.0	0.0	0.0	0.64	6.1	e
5	Spotchem/Ready	16	100.0	0.0	0.0	0.70	4.8	e
6	Piccolo	4	100.0	0.0	0.0	0.83	2.1	e

Sodium

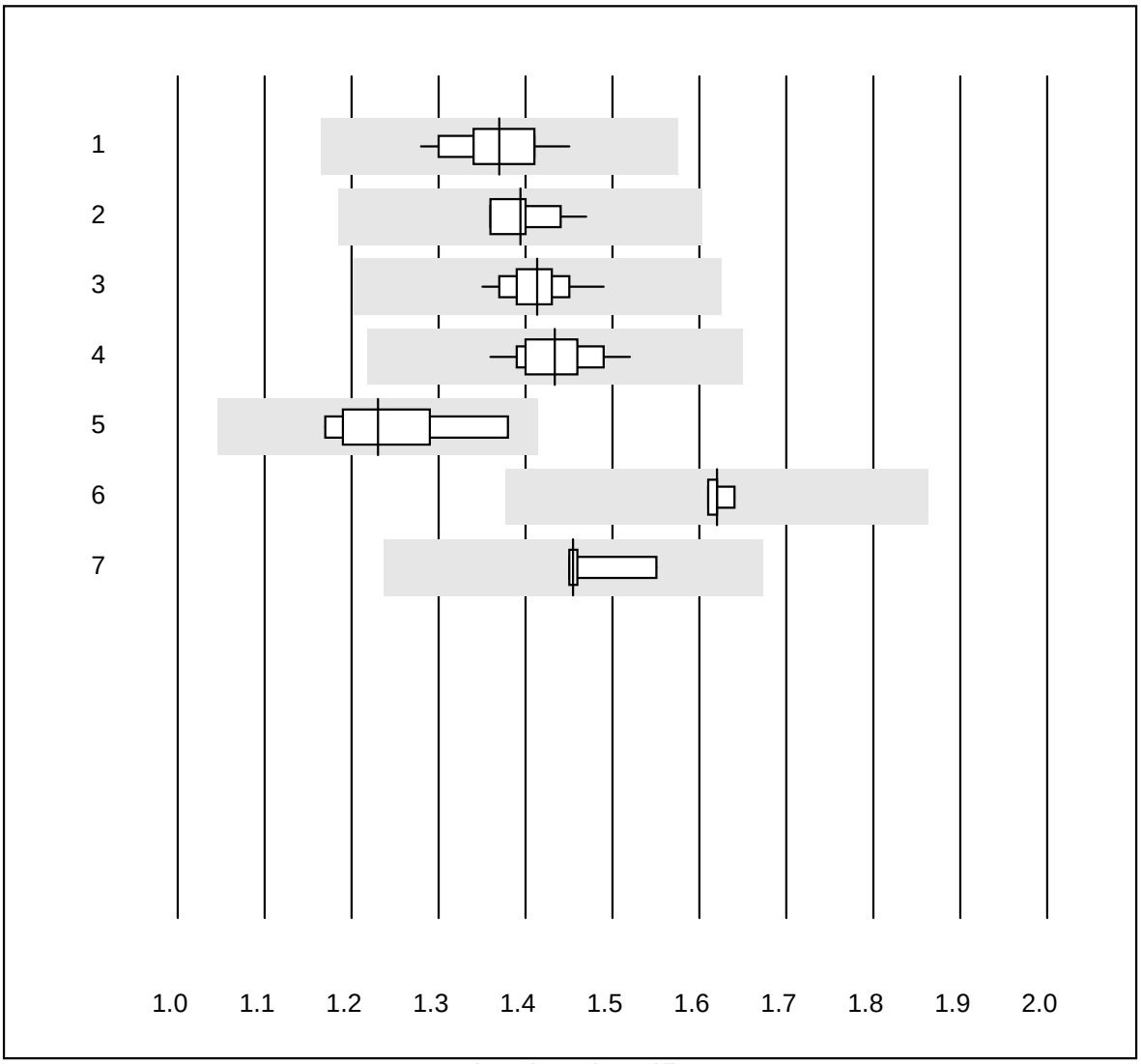


QUALAB tolerance : 6 %

Sodium (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ISE	22	100.0	0.0	0.0	137	2.3	e
2	Cobas	17	100.0	0.0	0.0	137	0.9	e
3	Fuji Dri-Chem	610	98.0	0.7	1.3	143	1.5	e
4	Spotchem D-Concept	111	99.1	0.0	0.9	139	1.1	e
5	Spotchem EL-SE 1520	122	96.7	0.8	2.5	138	1.9	e
6	Piccolo	15	100.0	0.0	0.0	131	2.2	e
7	Abx Mira	6	100.0	0.0	0.0	140	1.9	e*
8	iStat Chem8	5	100.0	0.0	0.0	137	0.4	e

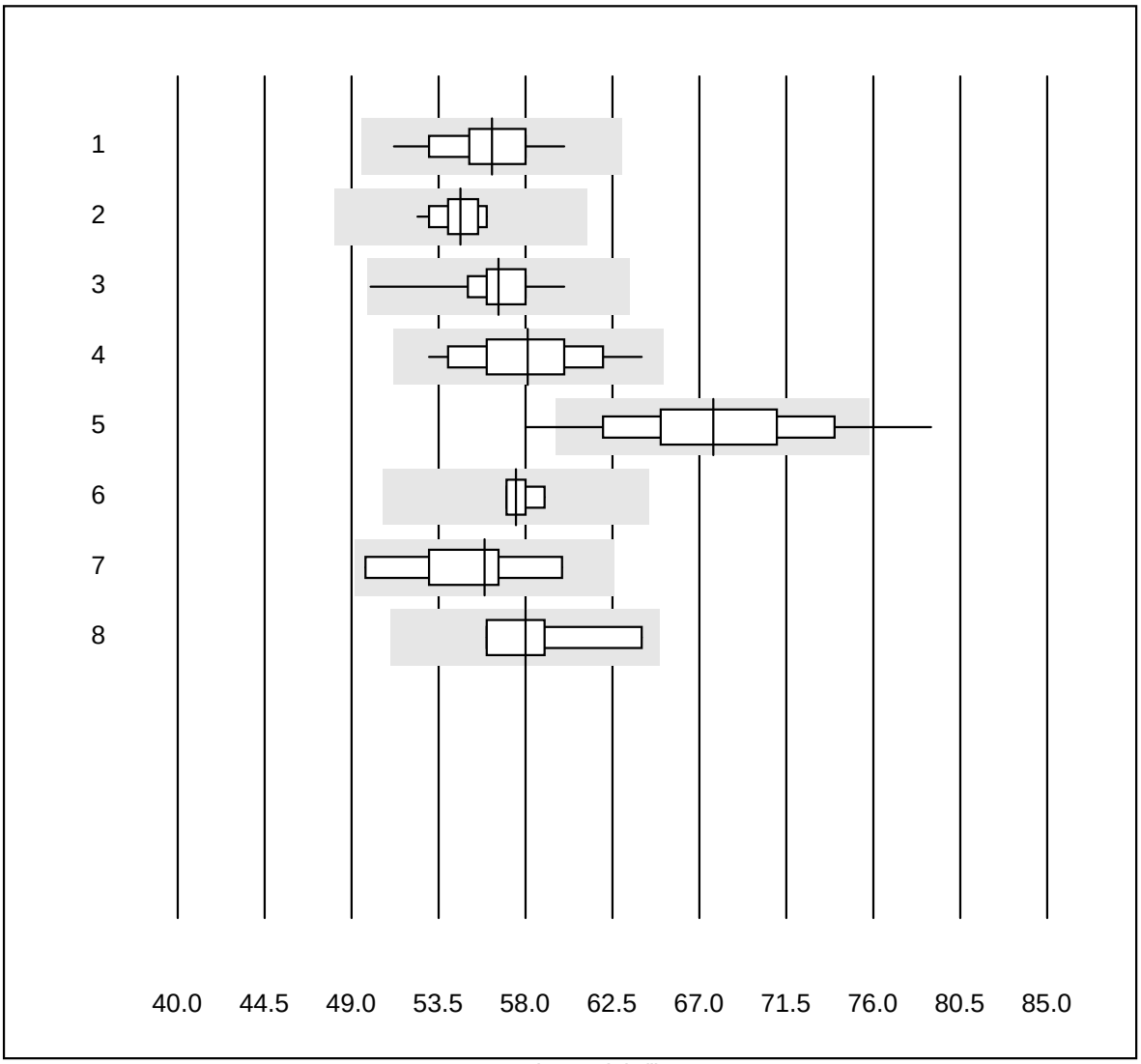
Phosphate



QUALAB tolerance : 15 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	11	100.0	0.0	0.0	1.4	3.8	e
2	Cobas	12	100.0	0.0	0.0	1.4	2.4	e
3	Fuji Dri-Chem	76	98.7	0.0	1.3	1.4	2.2	e
4	Spotchem D-Concept	15	100.0	0.0	0.0	1.4	2.8	e
5	Spotchem/Ready	7	100.0	0.0	0.0	1.2	5.9	e*
6	Piccolo	4	100.0	0.0	0.0	1.6	0.8	e
7	Abx Mira	4	100.0	0.0	0.0	1.5	3.3	e

Protein total

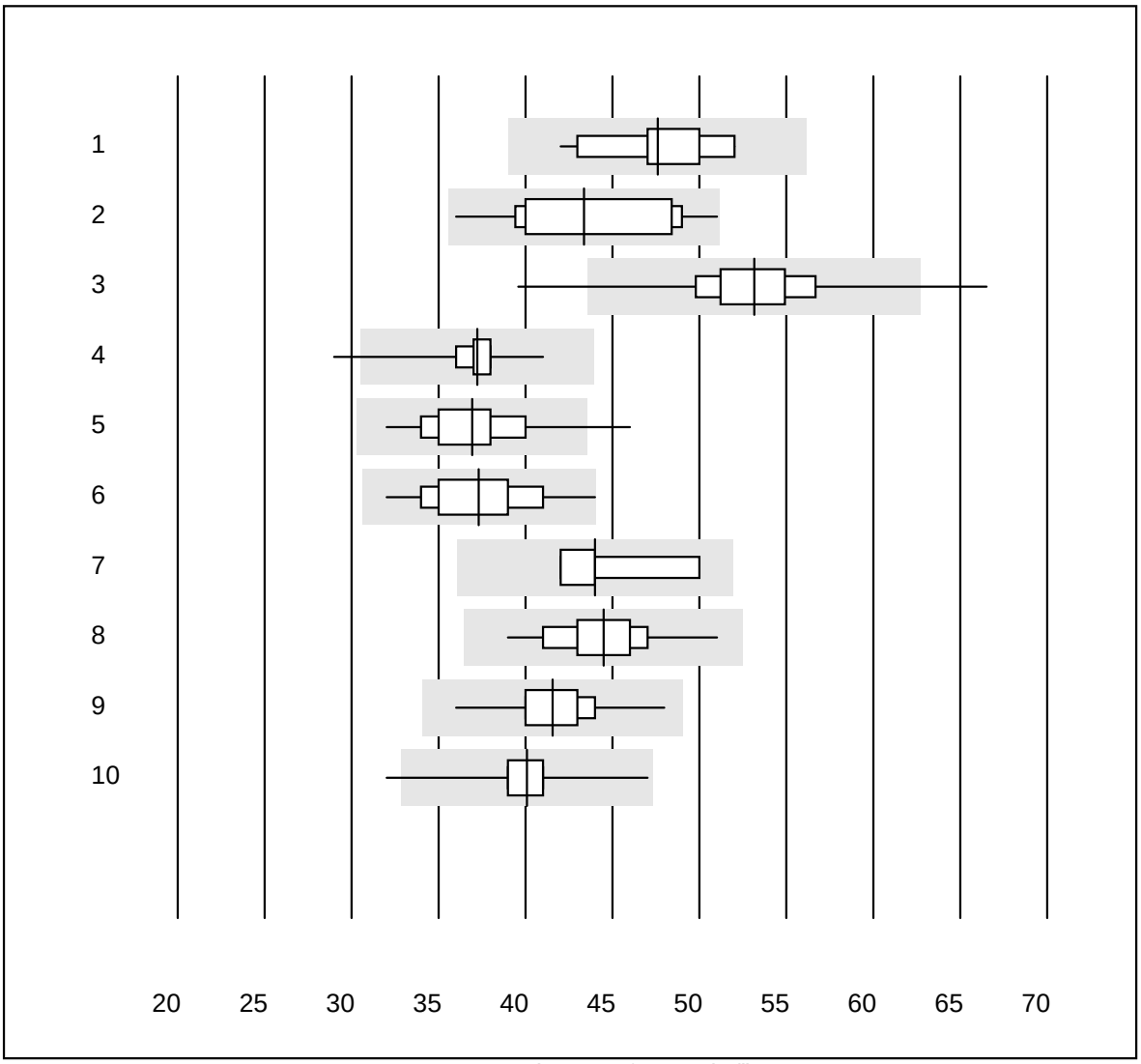


QUALAB tolerance : 12 %

Protein total (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	14	92.9	0.0	7.1	56.3	4.3	e
2	Cobas	13	100.0	0.0	0.0	54.6	2.2	e
3	Fuji Dri-Chem	165	100.0	0.0	0.0	56.6	2.5	e
4	Spotchem/Ready	43	97.7	0.0	2.3	58.1	5.0	e
5	Spotchem D-Concept	54	88.9	7.4	3.7	67.7	6.8	e
6	Piccolo	14	100.0	0.0	0.0	57.5	1.3	e
7	Abx Mira	7	100.0	0.0	0.0	55.9	5.8	e*
8	Hitachi S40/M40	4	100.0	0.0	0.0	58.0	6.0	e*

Aspartate aminotransferase

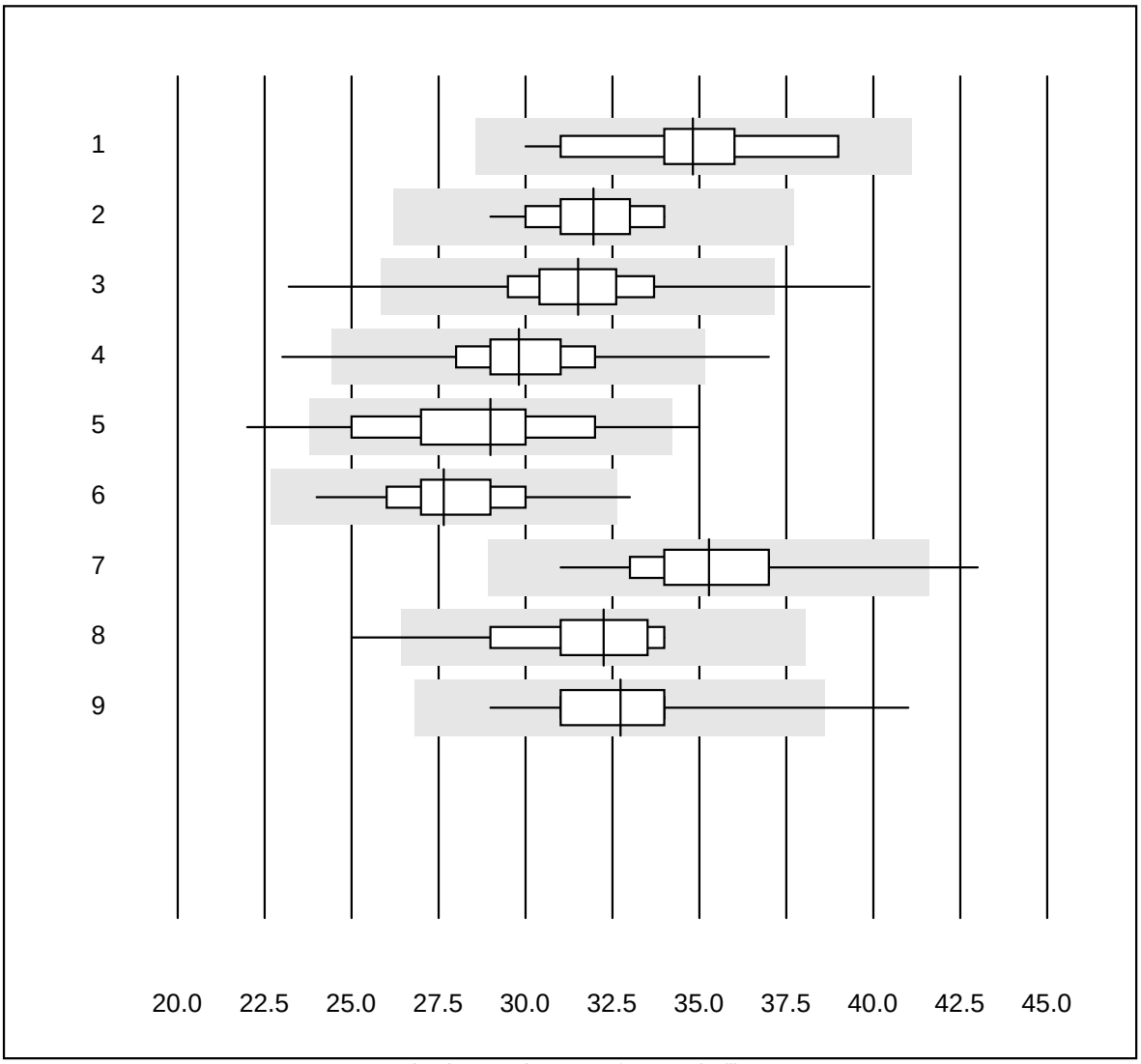


QUALAB tolerance : 18 %

Aspartate aminotransferase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC with Pyridox 37	13	100.0	0.0	0.0	48	7.0	e
2	Cobas	18	100.0	0.0	0.0	43	10.2	e*
3	Reflotron	951	97.3	1.4	1.3	53	5.8	e
4	Fuji Dri-Chem	662	99.2	0.5	0.3	37	3.3	e
5	Spotchem/Ready	164	98.2	1.8	0.0	37	7.1	e
6	Spotchem D-Concept	120	100.0	0.0	0.0	37	7.3	e
7	IFCC with Pyridox 37	5	80.0	0.0	20.0	44	8.0	e*
8	Piccolo	21	100.0	0.0	0.0	44	5.9	e
9	Abx Mira	21	100.0	0.0	0.0	42	6.1	e
10	Hitachi S40/M40	13	84.6	7.7	7.7	40	8.2	e*

Alanine aminotransferase

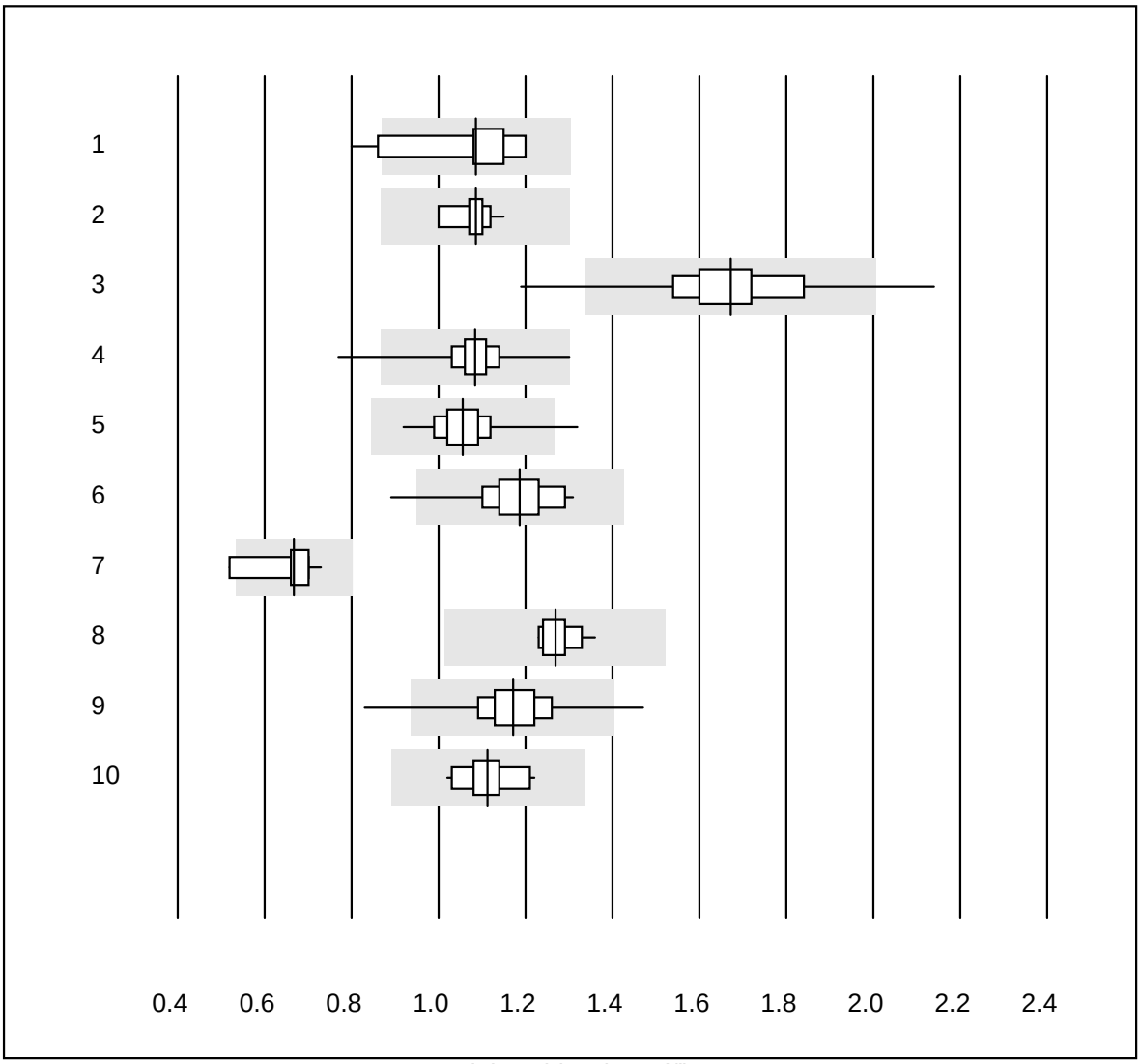


QUALAB tolerance : 18 %

Alanine aminotransferase (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	IFCC with Pyridox 37	14	100.0	0.0	0.0	35	7.5	e
2	Cobas	19	100.0	0.0	0.0	32	4.2	e
3	Reflotron	983	98.2	1.1	0.7	32	5.9	e
4	Fuji Dri-Chem	678	98.3	0.4	1.3	30	5.1	e
5	Spotchem/Ready	168	91.0	4.8	4.2	29	9.6	e
6	Spotchem D-Concept	123	98.4	1.6	0.0	28	6.4	e
7	Piccolo	22	95.5	4.5	0.0	35	7.4	e
8	Abx Mira	21	90.4	4.8	4.8	32	6.7	e
9	Hitachi S40/M40	13	76.9	7.7	15.4	33	9.5	e*

Triglycerides

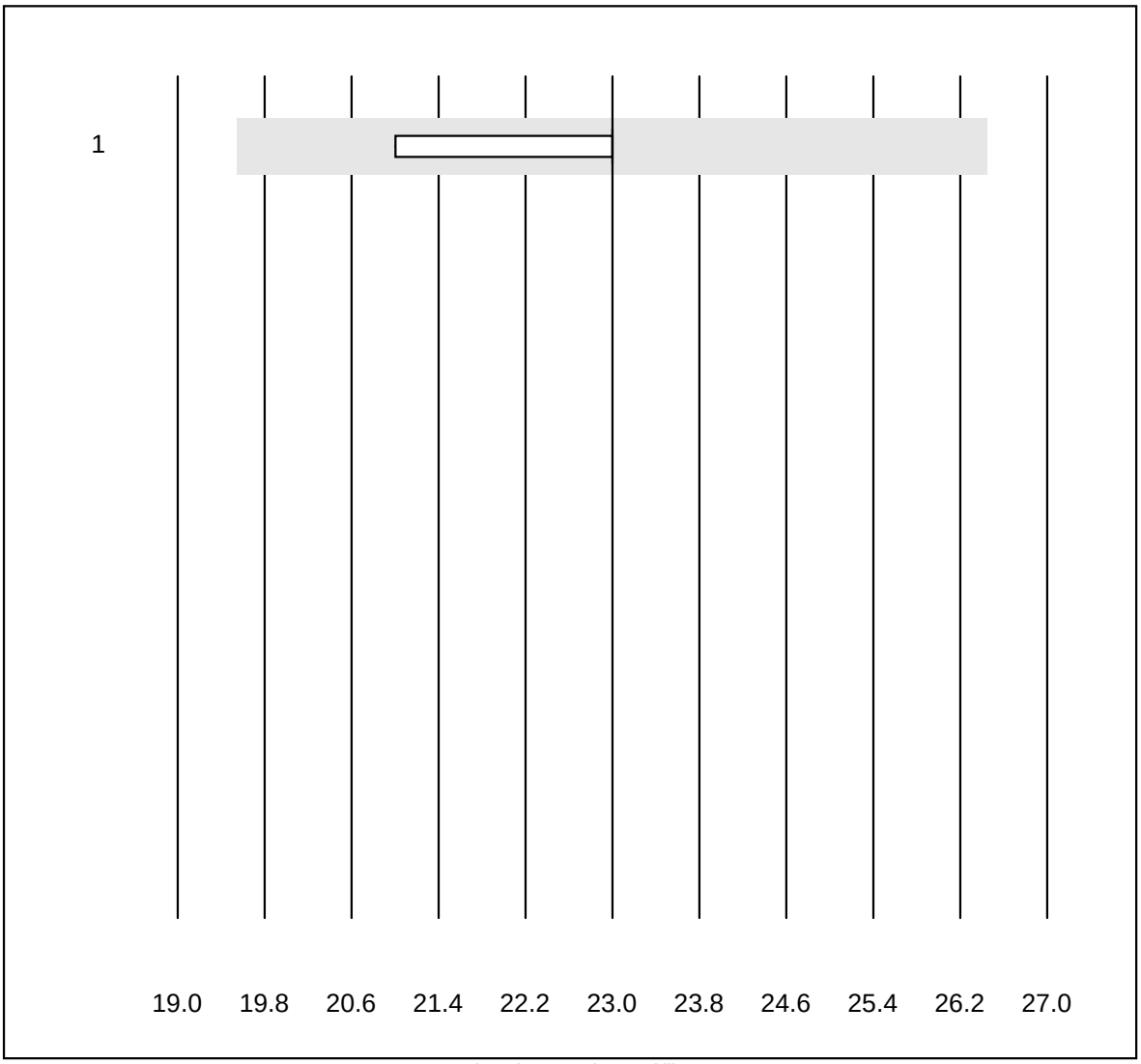


QUALAB tolerance : 20 %

Triglycerides (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	19	89.5	10.5	0.0	1.09	9.7	e
2	Cobas	18	100.0	0.0	0.0	1.09	3.5	e
3	Reflotron	746	96.2	2.1	1.7	1.67	7.5	e
4	Fuji Dri-Chem	617	98.2	0.5	1.3	1.08	4.3	e
5	Spotchem/Ready	147	99.3	0.7	0.0	1.06	5.7	e
6	Spotchem D-Concept	115	97.4	0.9	1.7	1.19	5.8	e
7	Hitachi S40/M40	10	90.0	10.0	0.0	0.67	8.7	e*
8	Piccolo	15	100.0	0.0	0.0	1.27	3.1	e
9	Cholestech LDX	192	95.8	1.6	2.6	1.17	6.6	e
10	Abx Mira	18	100.0	0.0	0.0	1.11	5.2	e

Bicarbonat

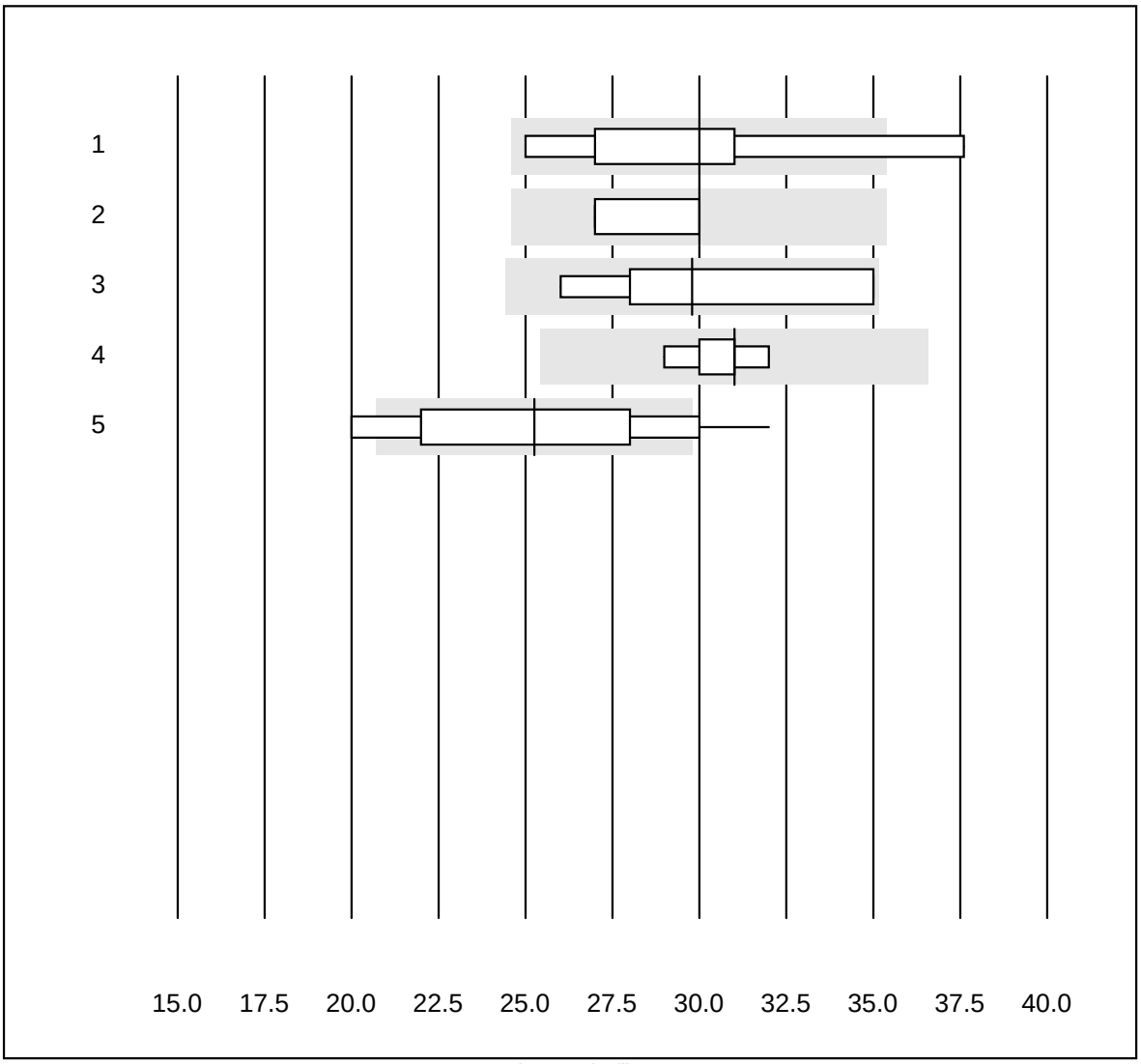


QUALAB tolerance : 15 %

Bicarbonat (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Piccolo	6	100.0	0.0	0.0	23	3.6	e

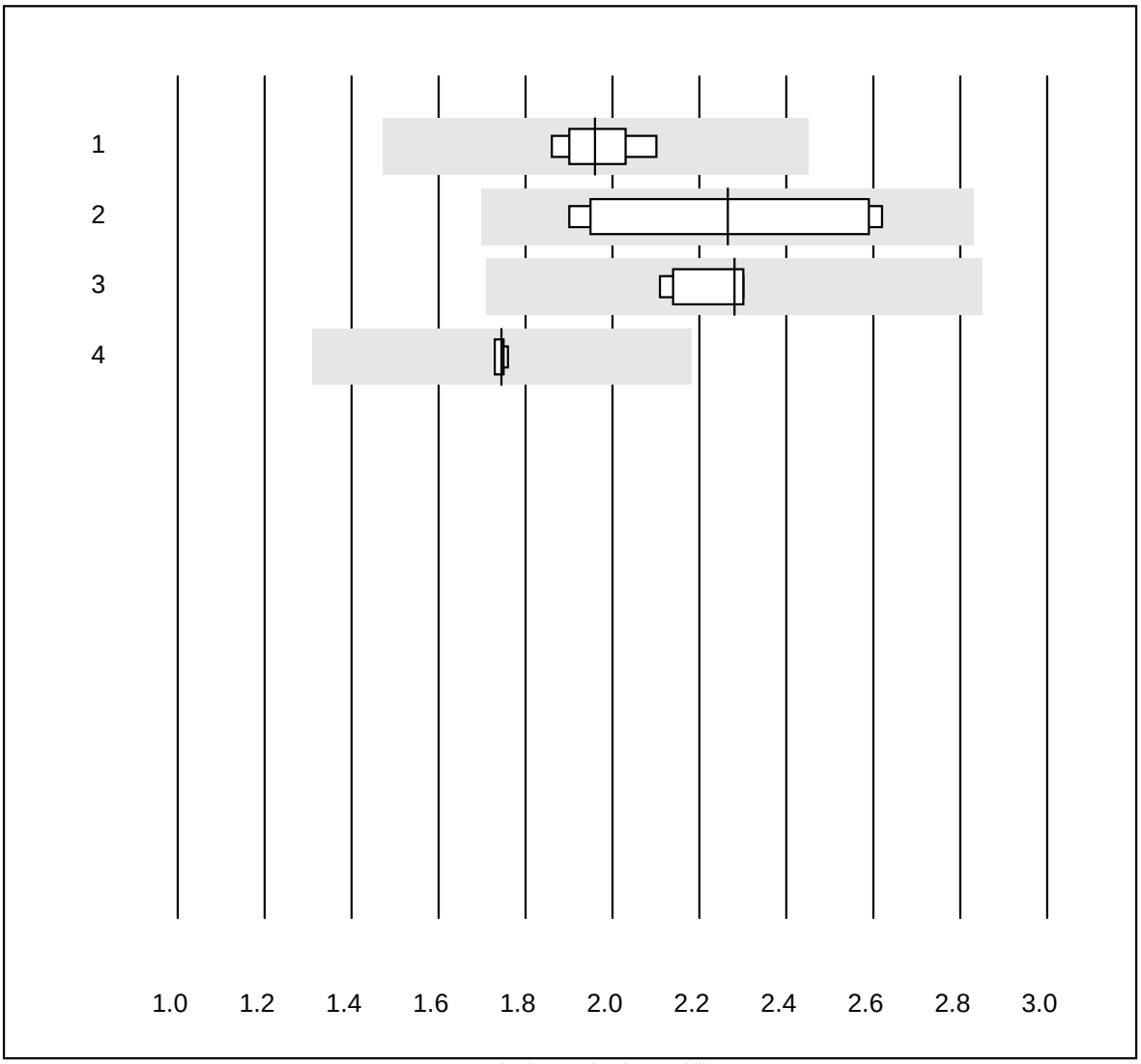
Lipase



QUALAB tolerance : 18 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Mira	5	80.0	20.0	0.0	30.0	16.0	e*
2	Architect	4	100.0	0.0	0.0	30.0	5.1	e*
3	Beckman/Olympus	5	100.0	0.0	0.0	29.8	13.1	e*
4	Standard chemistry	9	77.8	0.0	22.2	31.0	3.2	e
5	Fuji Dri-Chem	40	70.0	22.5	7.5	25.2	13.7	e*

LDL Cholesterin

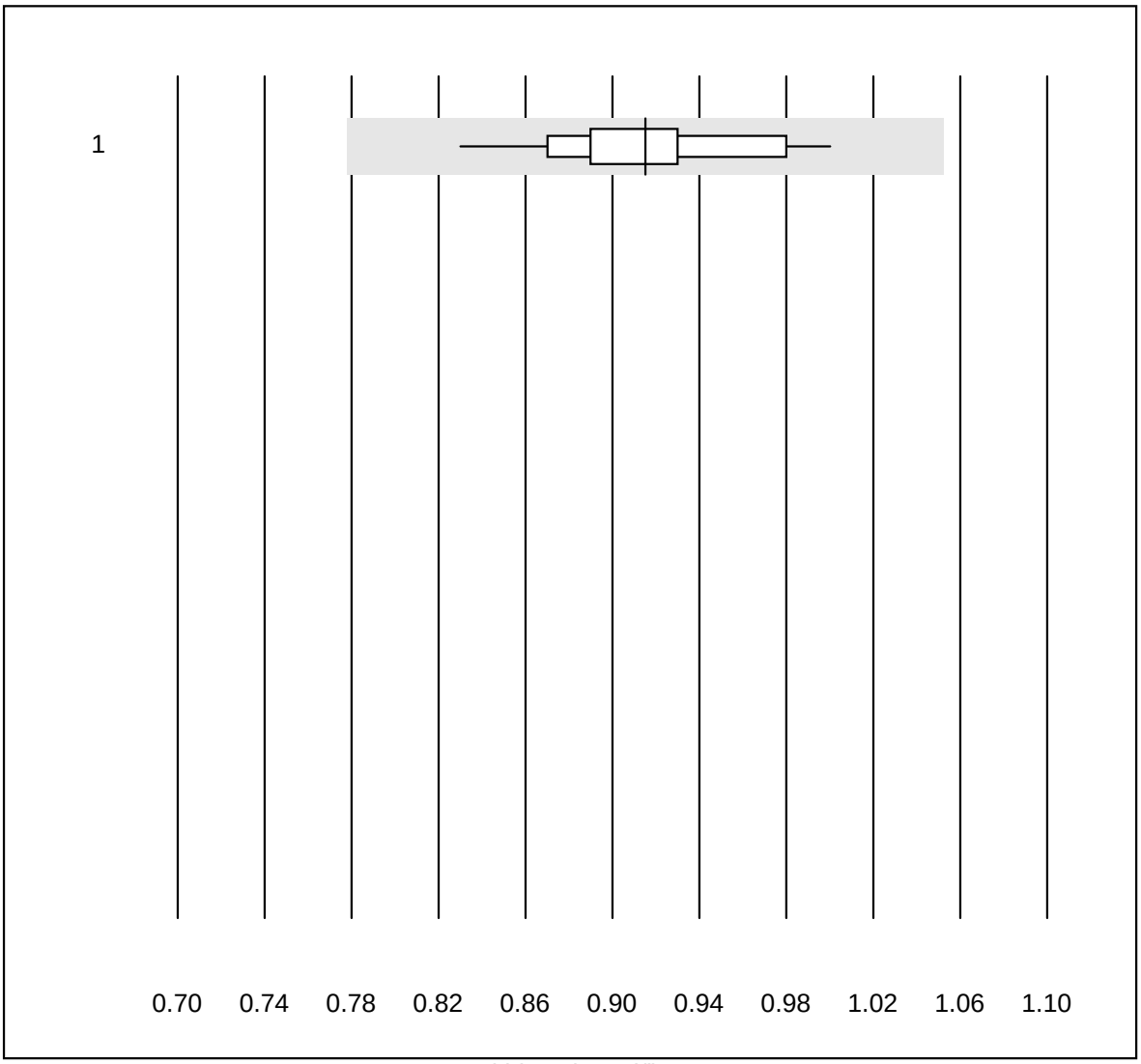


QUALAB tolerance : 25 %

LDL Cholesterin (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Abx Mira	9	100.0	0.0	0.0	2.0	4.0	e
2	Standard chemistry	6	100.0	0.0	0.0	2.3	13.5	e*
3	Roche, Cobas	5	100.0	0.0	0.0	2.3	4.2	e
4	Hitachi S40/M40	4	100.0	0.0	0.0	1.7	0.7	e

Lithium

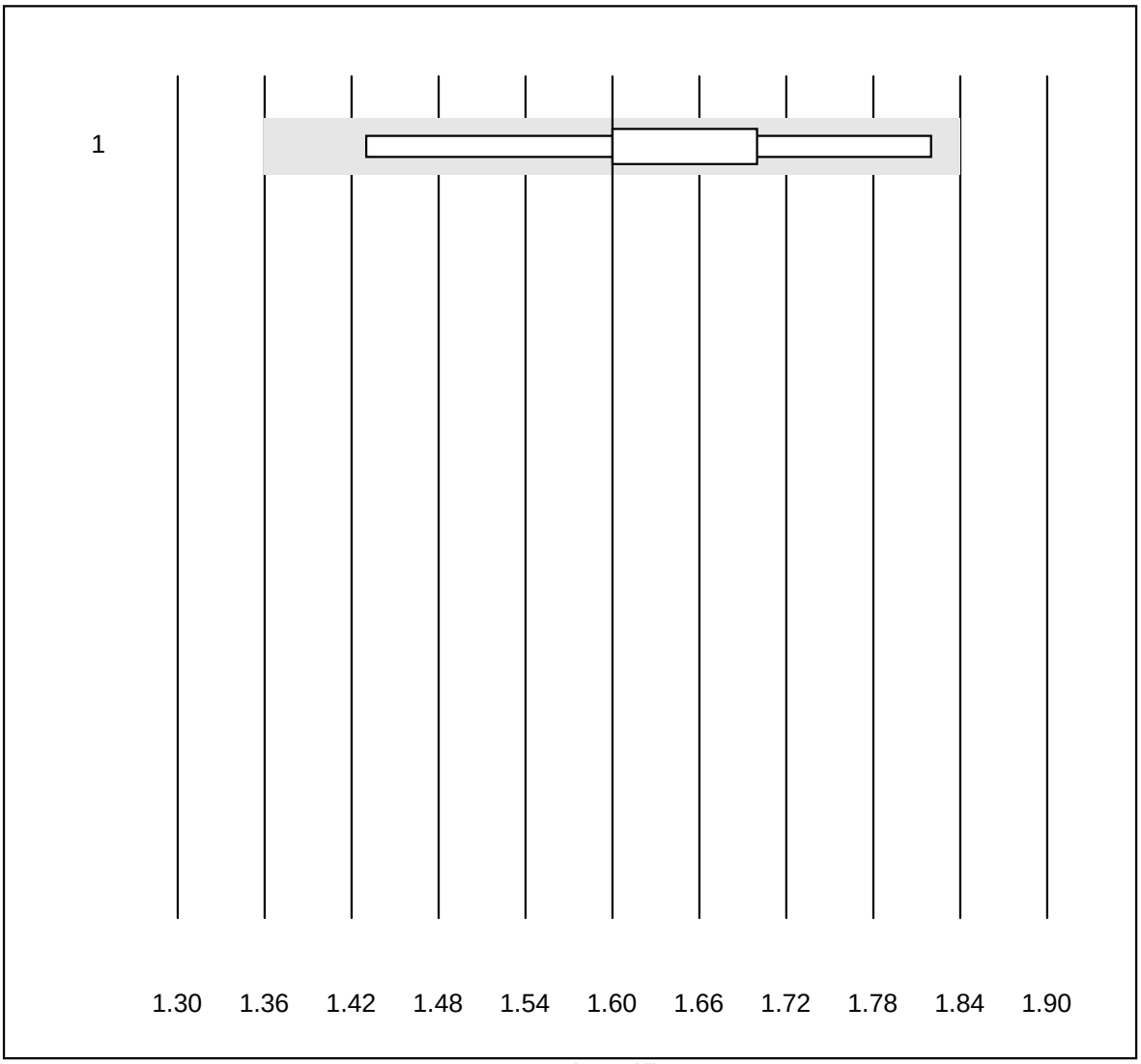


QUALAB tolerance : 15 %

Lithium (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	14	100.0	0.0	0.0	0.92	5.0	e

Lactate

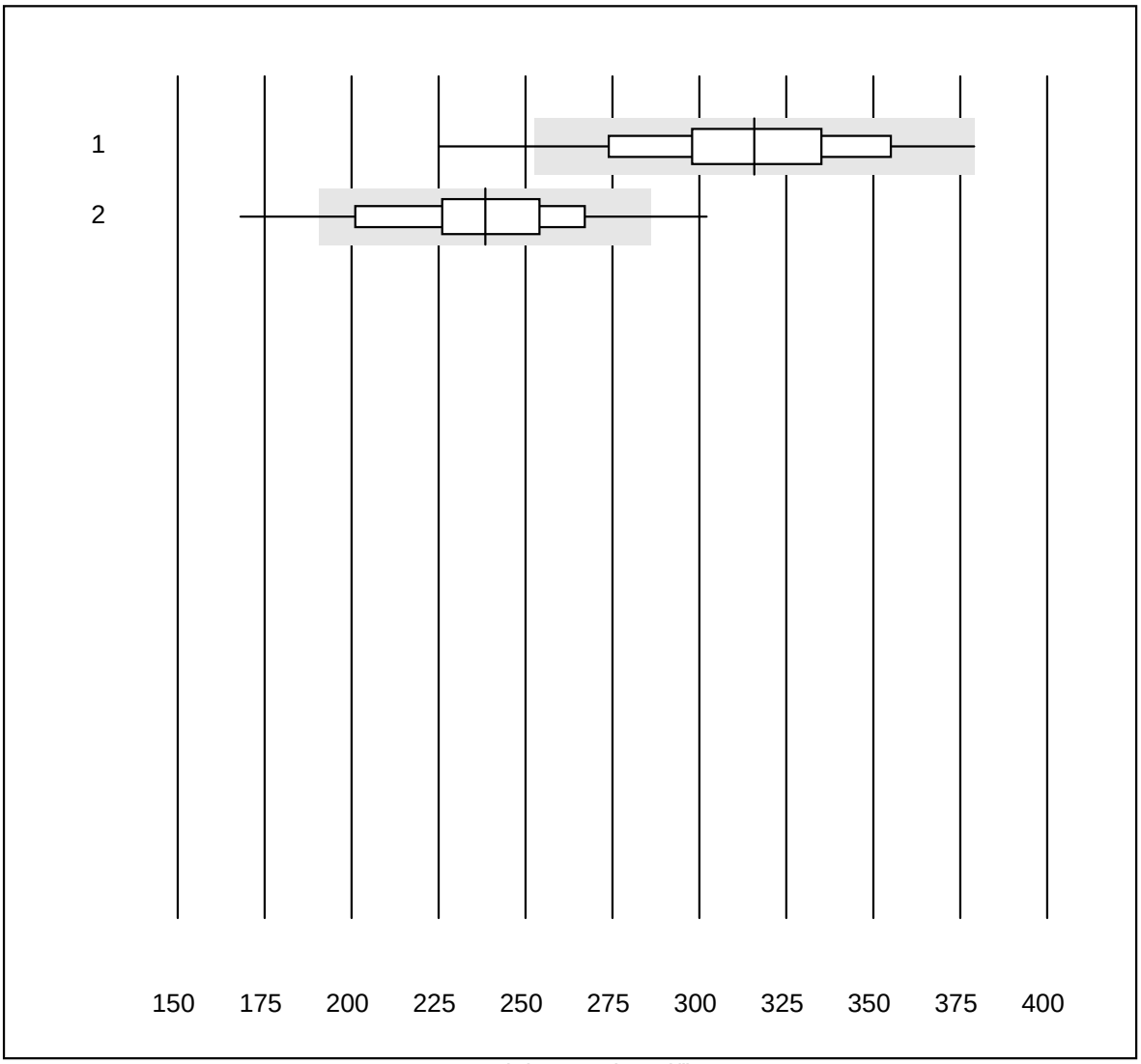


QUALAB tolerance : 15 %

Lactate (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	7	71.4	0.0	28.6	1.60	8.7	e*

Creatinine SP

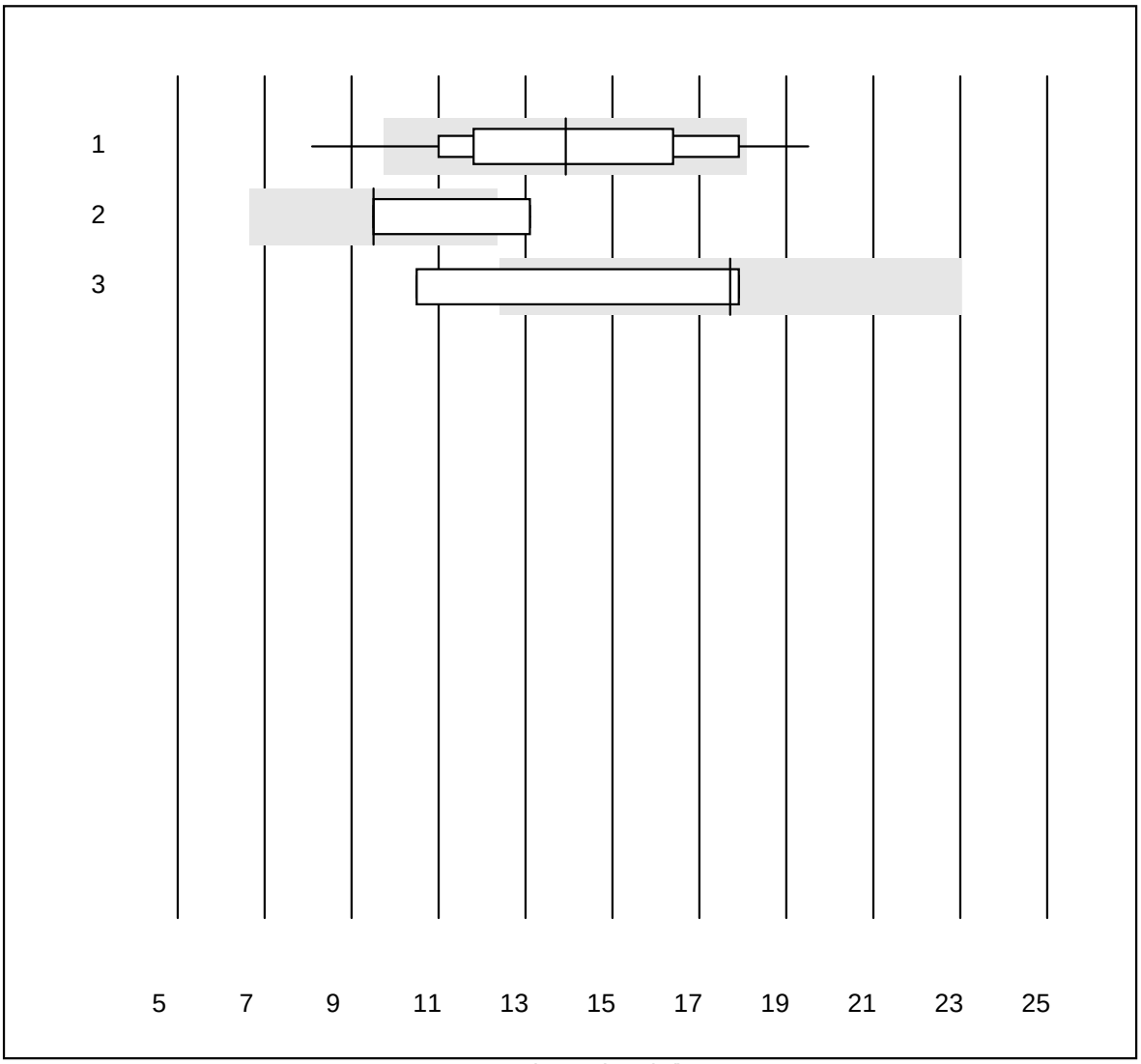


QUALAB tolerance : 20 %

Creatinine SP (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Spotchem/Ready	162	93.2	5.6	1.2	316	9.8	e
2	Spotchem D-Concept	123	88.6	6.5	4.9	238	10.3	e

eGFR (Spotchem)

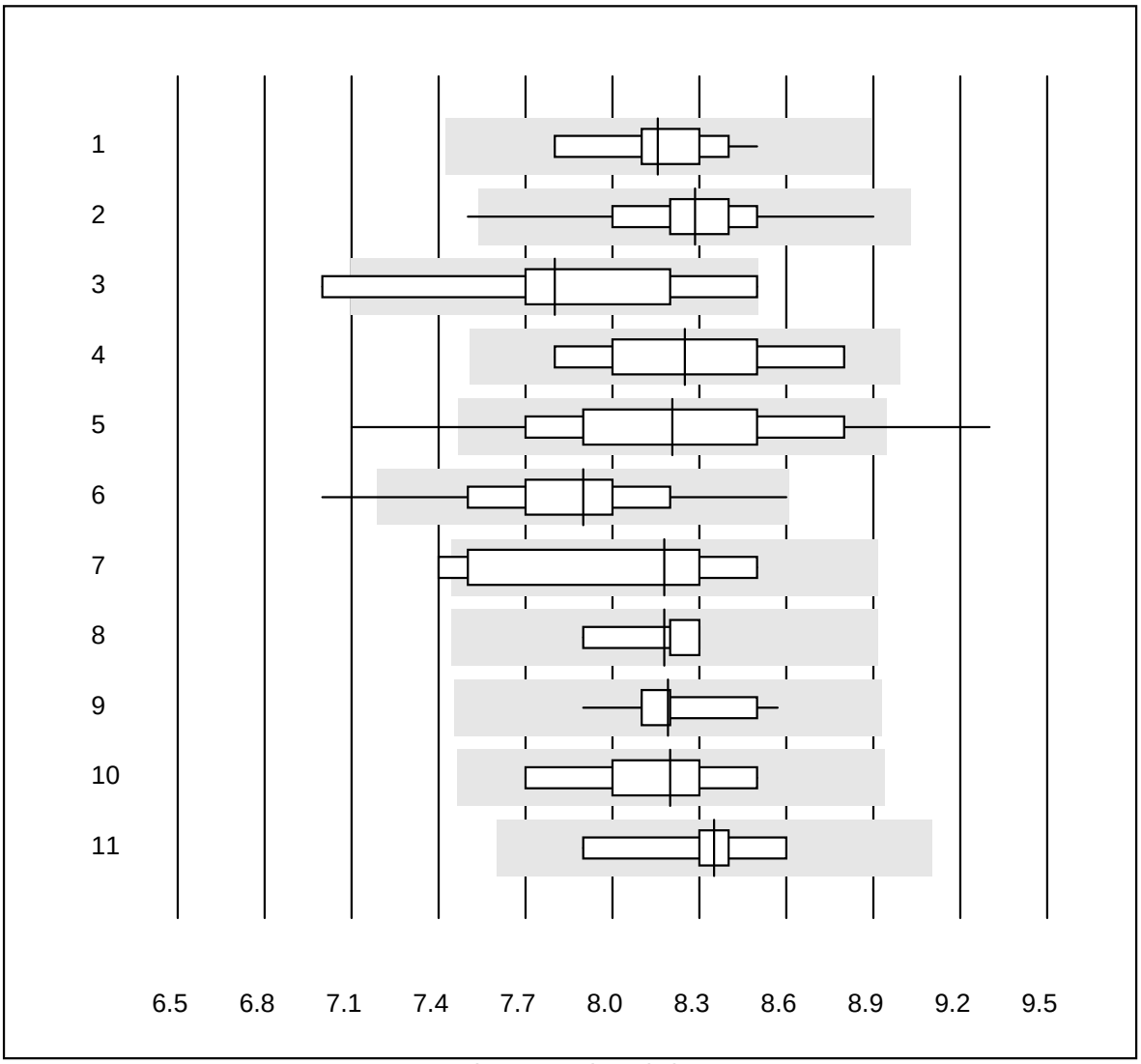


QUALAB tolerance : 20 %

eGFR (Spotchem) ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CKD-EPI	89	80.9	6.7	12.4	14	19.1	a
2	Cockcroft-Gault	5	20.0	20.0	60.0	10	22.5	a
3	MDRD	4	50.0	25.0	25.0	18	27.2	a

HbA1c ample A

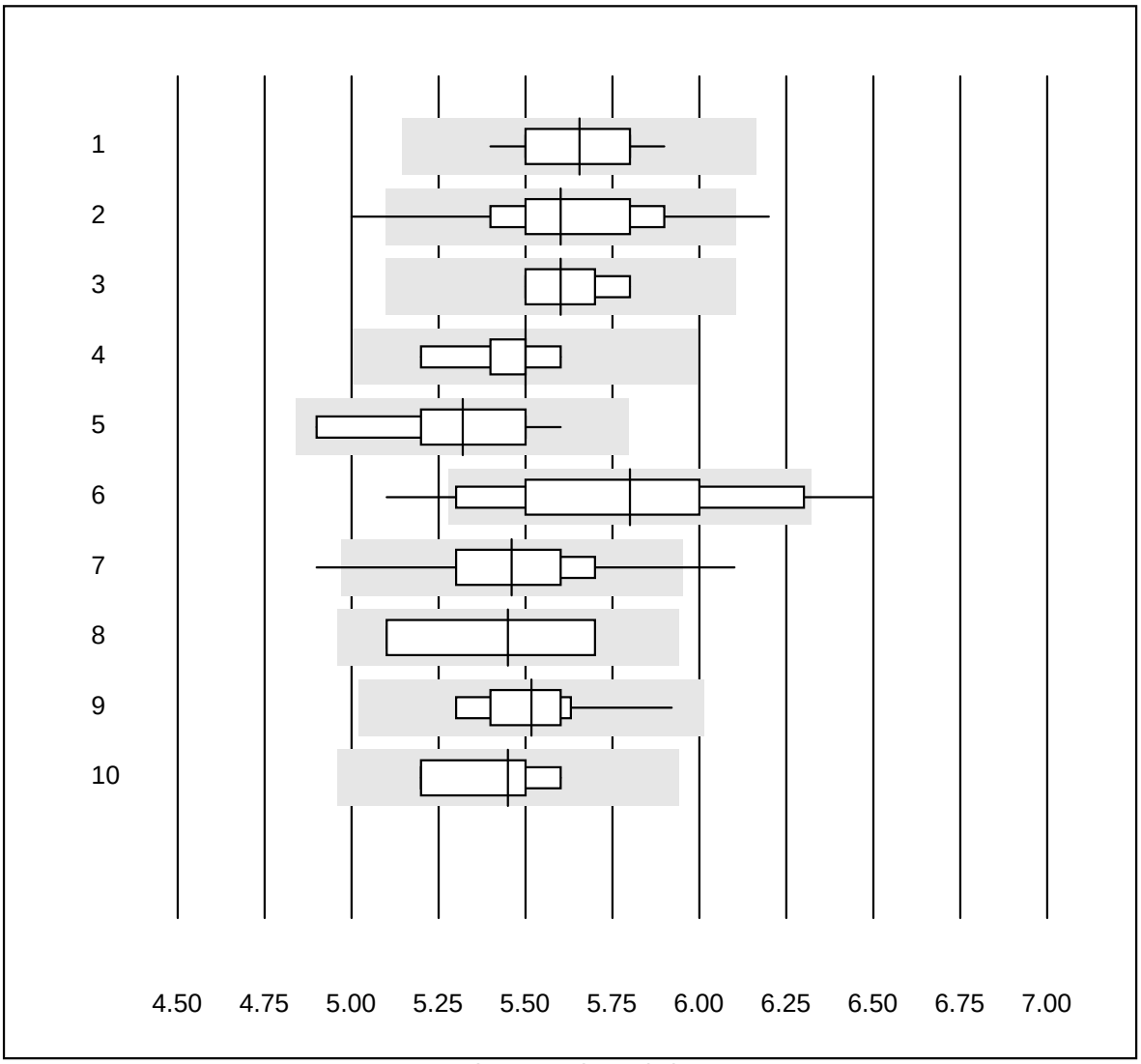


QUALAB tolerance : 9 %

HbA1c ample A (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b101	14	100.0	0.0	0.0	8.2	2.5	e
2	Afinion	566	99.4	0.2	0.4	8.3	2.5	e
3	Eurolyser	9	88.9	11.1	0.0	7.8	6.0	e*
4	Hemocue HbA1c 501	10	100.0	0.0	0.0	8.3	4.3	e*
5	NycoCard	131	83.2	9.2	7.6	8.2	5.4	e
6	DCA2000/Vantage	208	99.0	1.0	0.0	7.9	3.4	e
7	Others	8	75.0	12.5	12.5	8.2	5.4	a
8	HPLC	6	83.3	0.0	16.7	8.2	2.1	a
9	Roche, Cobas	20	90.0	0.0	10.0	8.2	1.8	e
10	Hitado Super D	5	100.0	0.0	0.0	8.2	3.7	e*
11	A1c Now	5	100.0	0.0	0.0	8.4	3.1	e*

HbA1c Probe B

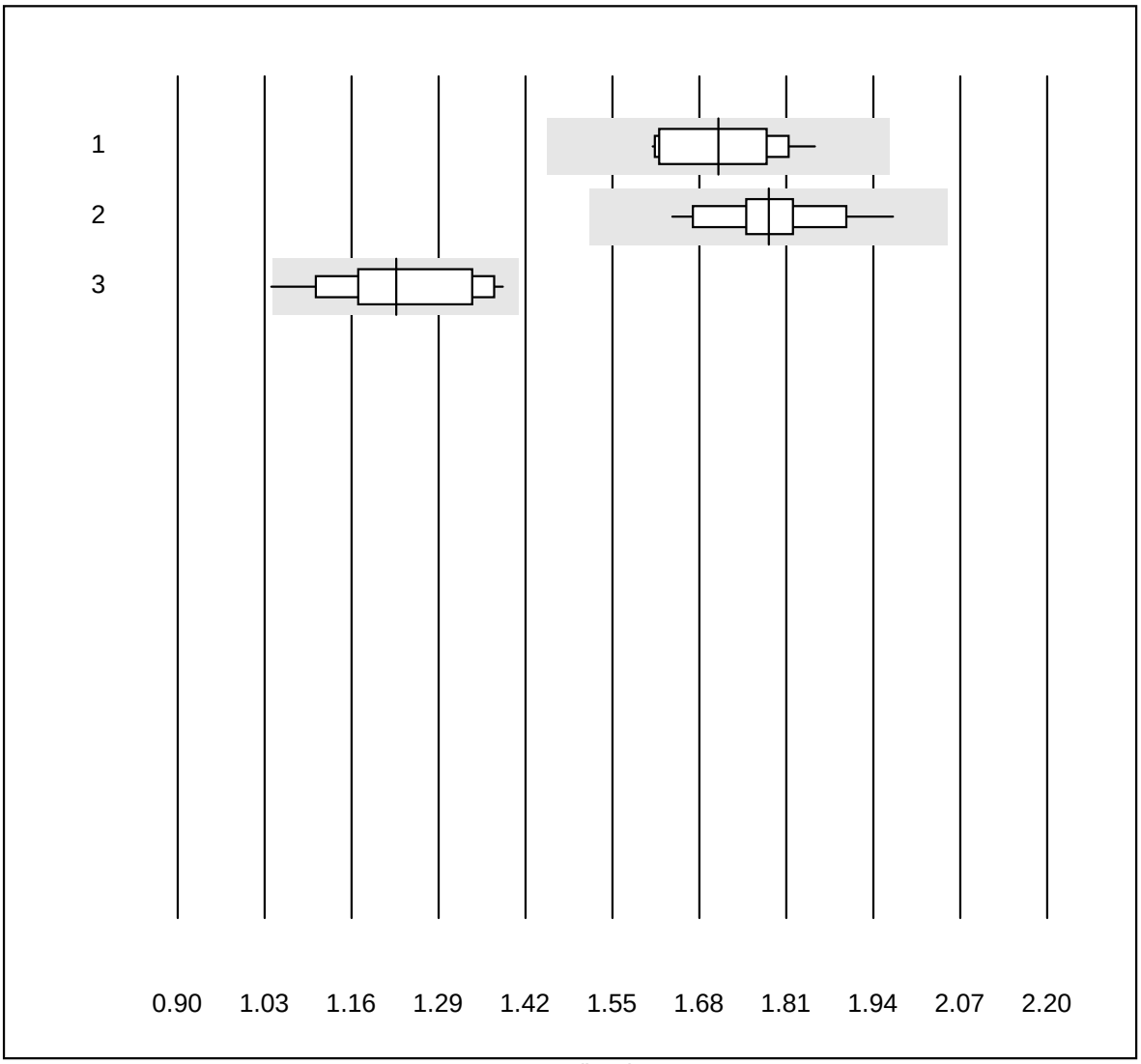


QUALAB tolerance : 9 %

HbA1c Probe B (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b101	22	100.0	0.0	0.0	5.7	2.4	e
2	Afinion	553	98.9	0.9	0.2	5.6	3.2	e
3	Eurolyser	4	100.0	0.0	0.0	5.6	2.7	e*
4	A1c Now	6	83.3	0.0	16.7	5.5	2.8	e*
5	Hemocue HbA1c 501	11	90.9	0.0	9.1	5.3	3.9	e*
6	NycoCard	121	80.2	14.0	5.8	5.8	6.1	e
7	DCA2000/Vantage	200	95.5	2.0	2.5	5.5	3.4	e
8	Others	5	80.0	0.0	20.0	5.5	5.2	a
9	Roche, Cobas	15	100.0	0.0	0.0	5.5	3.0	e
10	Hitado Super D	4	100.0	0.0	0.0	5.5	3.1	e*

pCO2

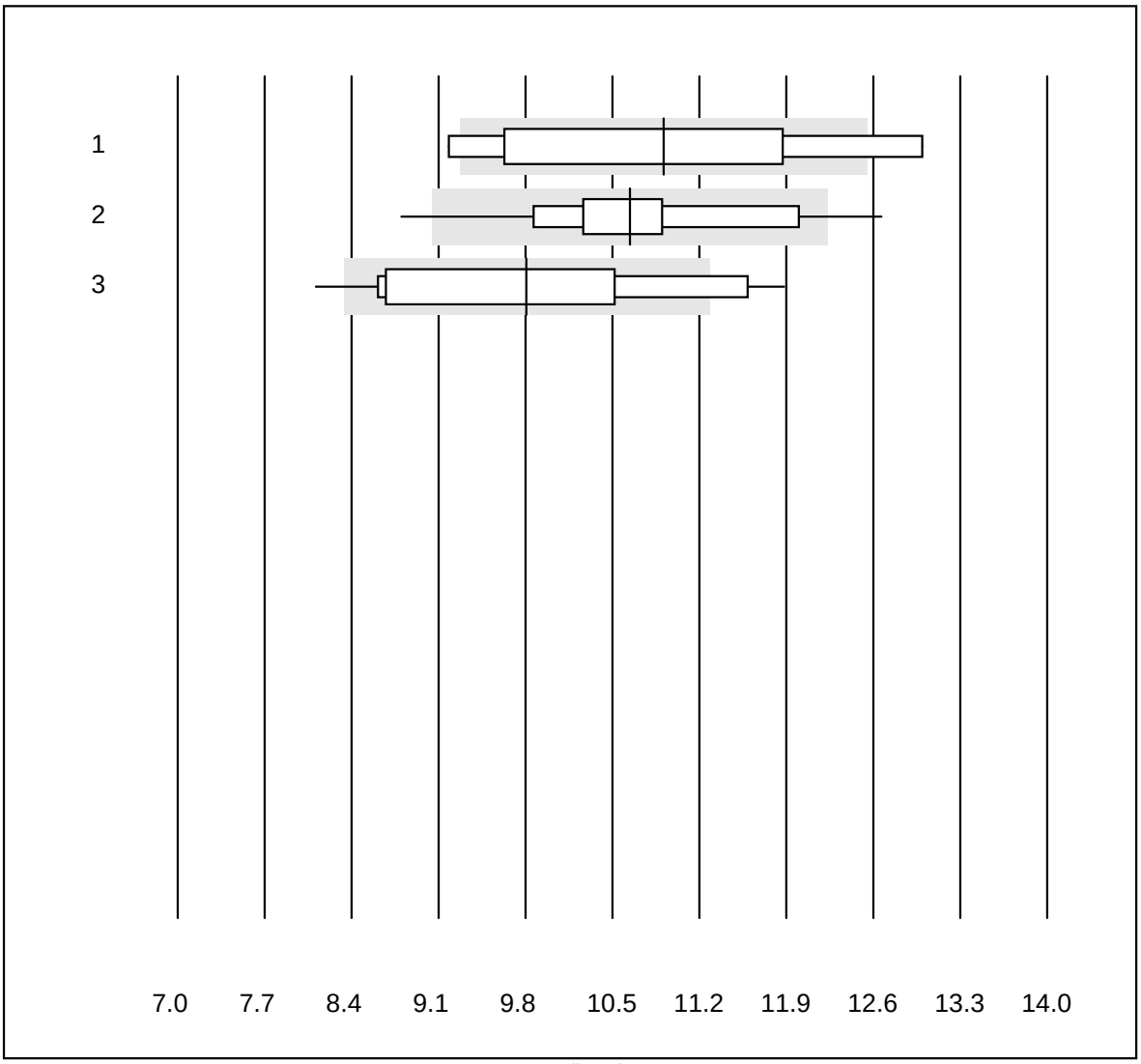


QUALAB tolerance : 15 %

pCO2 (kPa)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	13	100.0	0.0	0.0	1.71	4.8	e
2	iStat	36	100.0	0.0	0.0	1.78	4.3	e
3	EPOC	17	88.2	5.9	5.9	1.23	8.2	e*

pO2

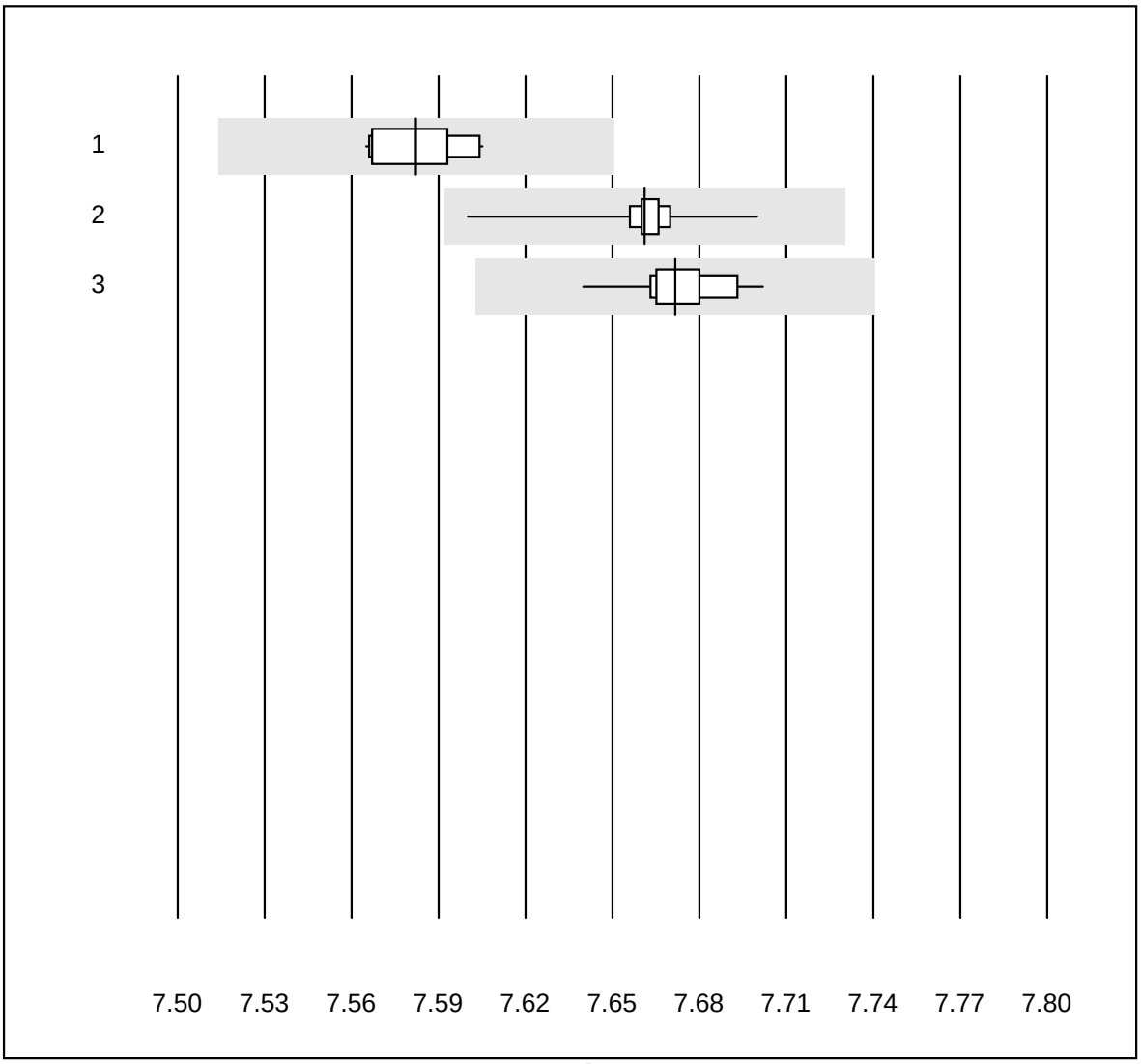


QUALAB tolerance : 15 %

pO2 (kPa)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	10	60.0	30.0	10.0	10.91	13.1	e*
2	iStat	34	85.3	11.8	2.9	10.64	7.8	e
3	EPOC	17	58.9	17.6	23.5	9.81	11.8	e*

pH

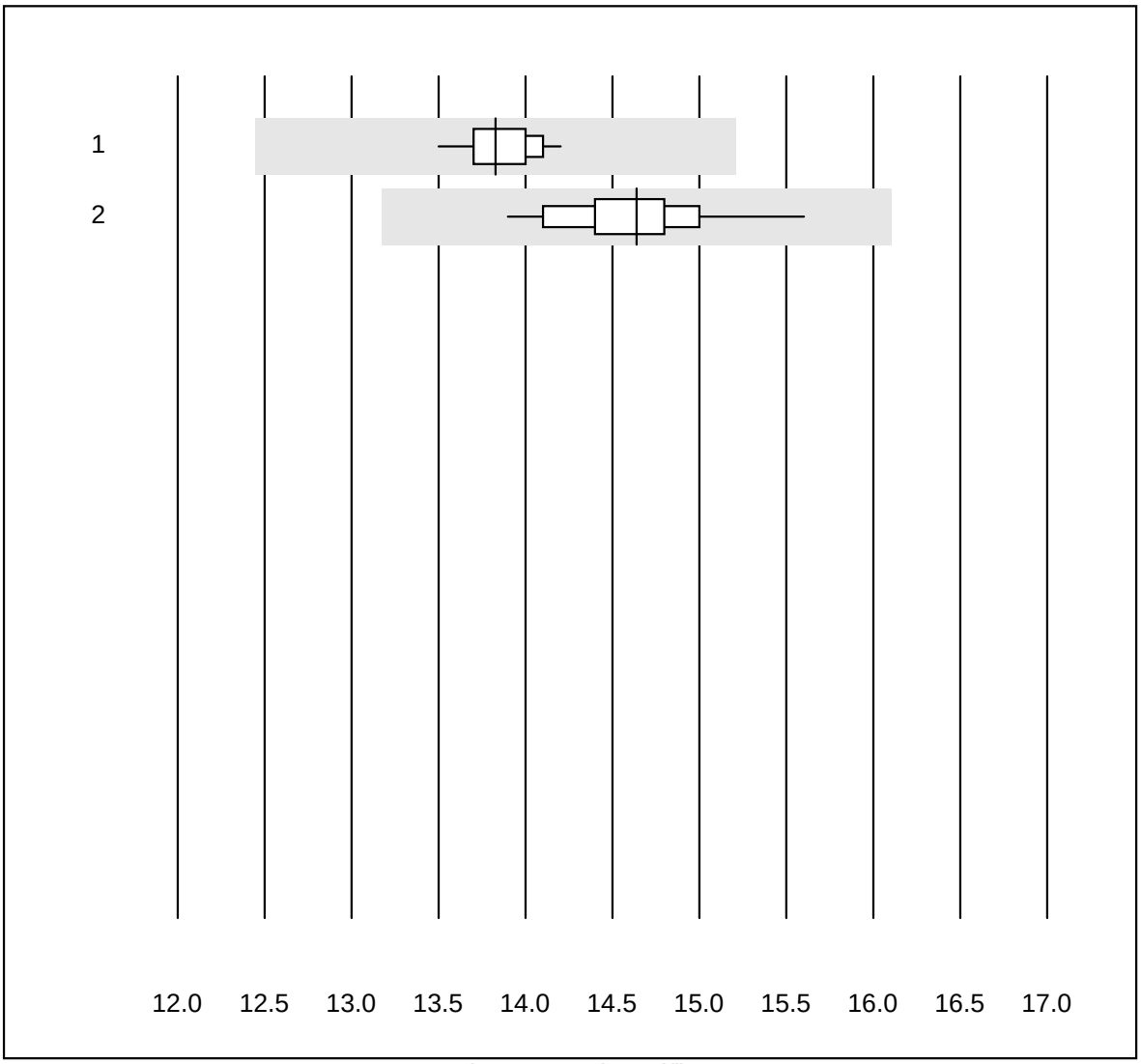


QUALAB tolerance : 1 %

pH ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	12	100.0	0.0	0.0	7.58	0.2	e
2	iStat	36	97.2	0.0	2.8	7.66	0.2	e
3	EPOC	17	94.1	0.0	5.9	7.67	0.2	e

Glucose BG

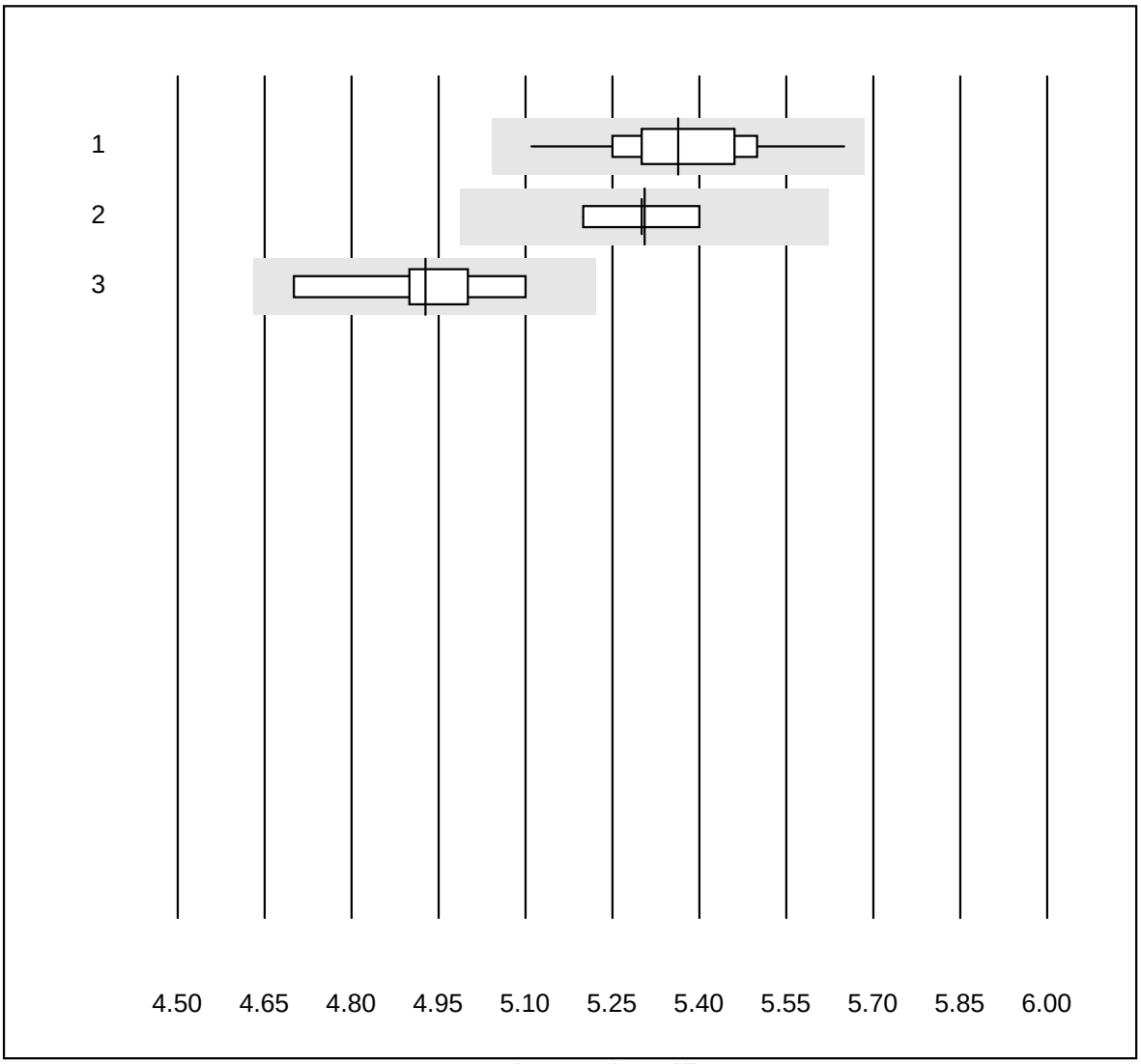


QUALAB tolerance : 10 %

Glucose BG (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	iStat	14	100.0	0.0	0.0	13.8	1.4	e
2	EPOC	12	100.0	0.0	0.0	14.6	3.0	e

Potassium BG

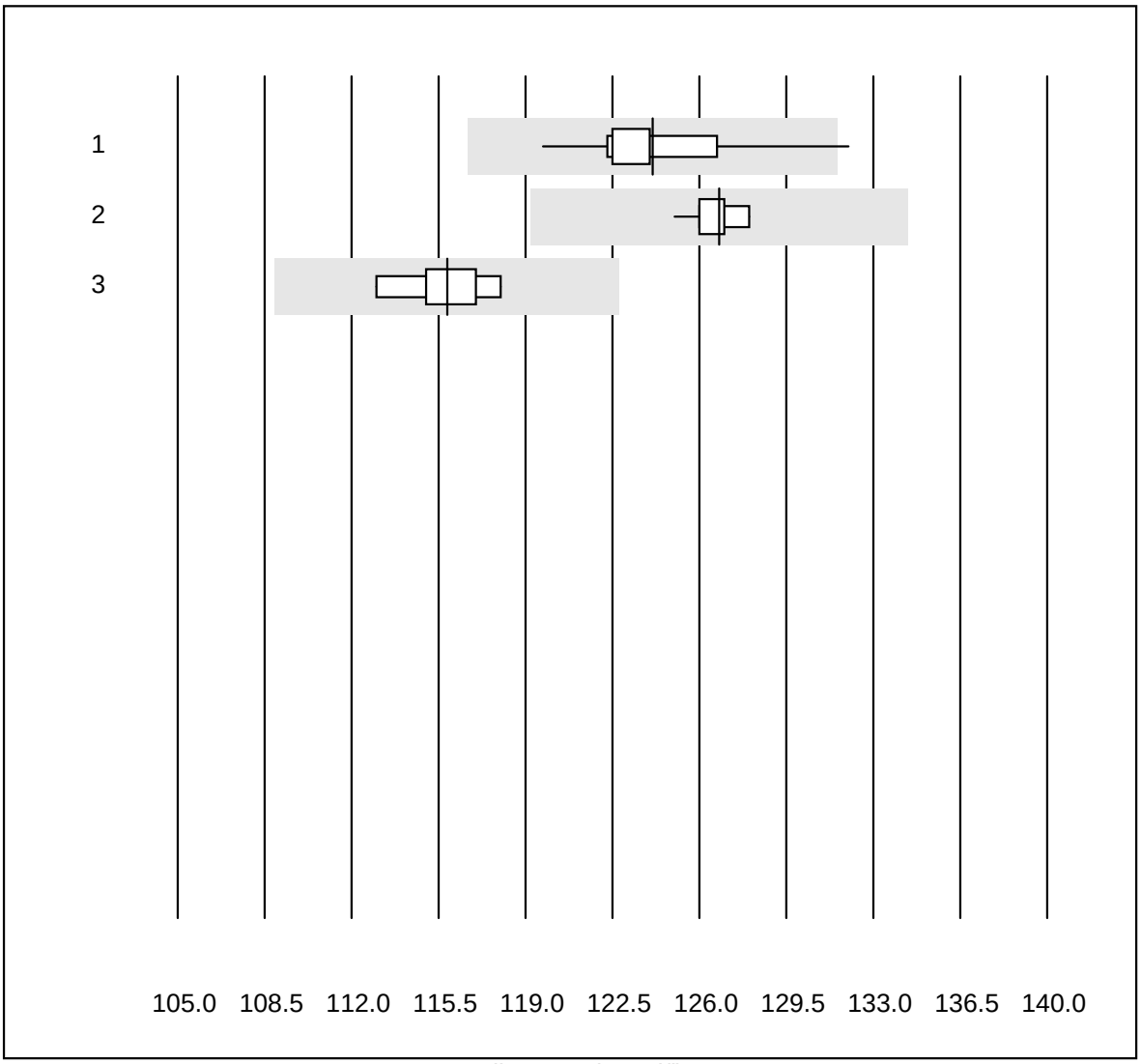


QUALAB tolerance : 6 %

Potassium BG (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	11	100.0	0.0	0.0	5.4	2.6	e*
2	iStat	20	100.0	0.0	0.0	5.3	1.1	e
3	EPOC	16	100.0	0.0	0.0	4.9	2.4	e

Sodium BG

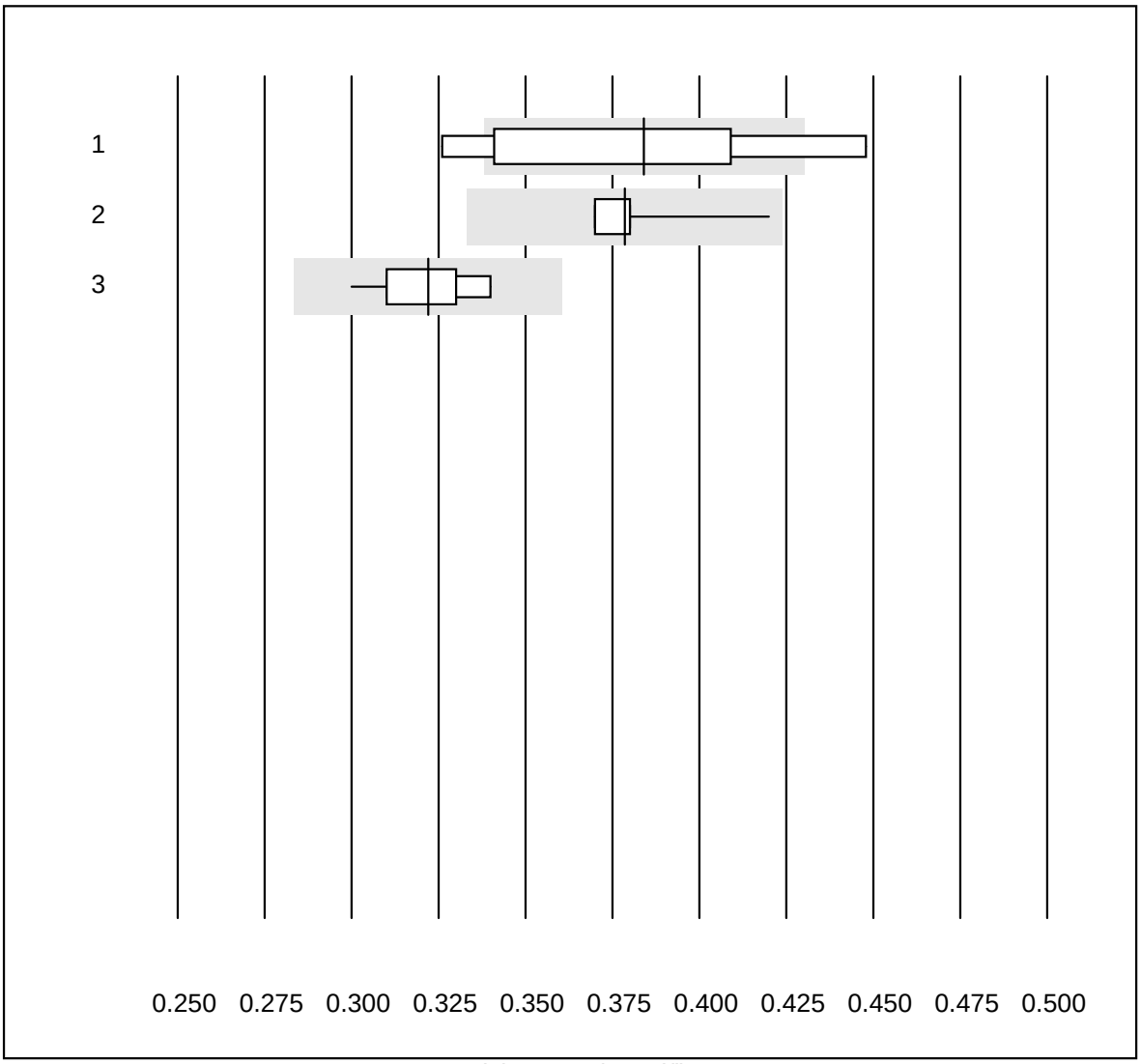


QUALAB tolerance : 6 %

Sodium BG (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	12	91.7	8.3	0.0	124.1	2.5	e
2	iStat	20	100.0	0.0	0.0	126.8	0.7	e
3	EPOC	15	100.0	0.0	0.0	115.9	1.4	e

Calcium-BG

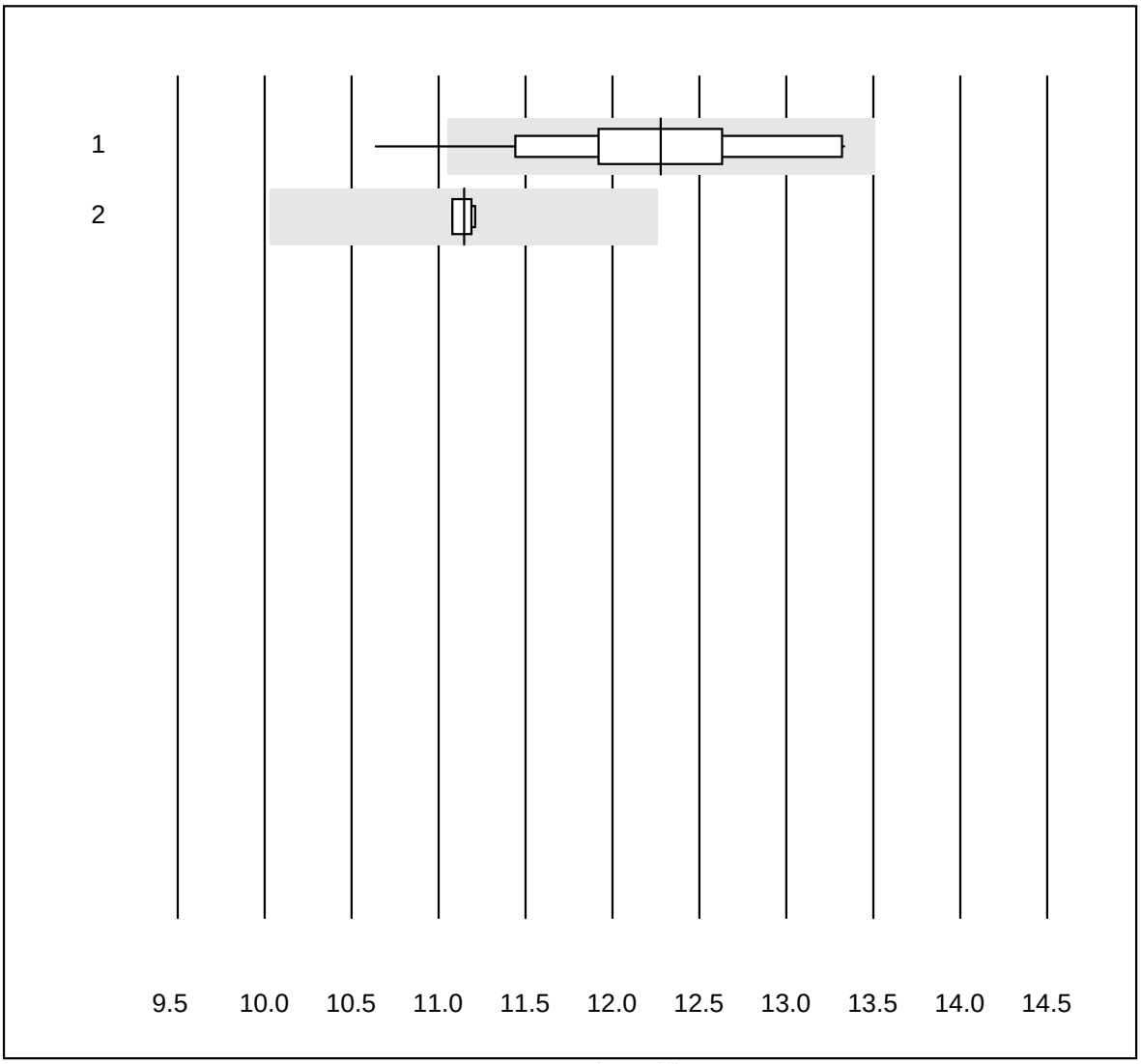


QUALAB tolerance : 12 %

Calcium-BG (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b121/123/221	8	62.5	37.5	0.0	0.38	11.2	e*
2	iStat	13	100.0	0.0	0.0	0.38	3.6	e
3	EPOC	16	100.0	0.0	0.0	0.32	3.7	e

Lactate-BG

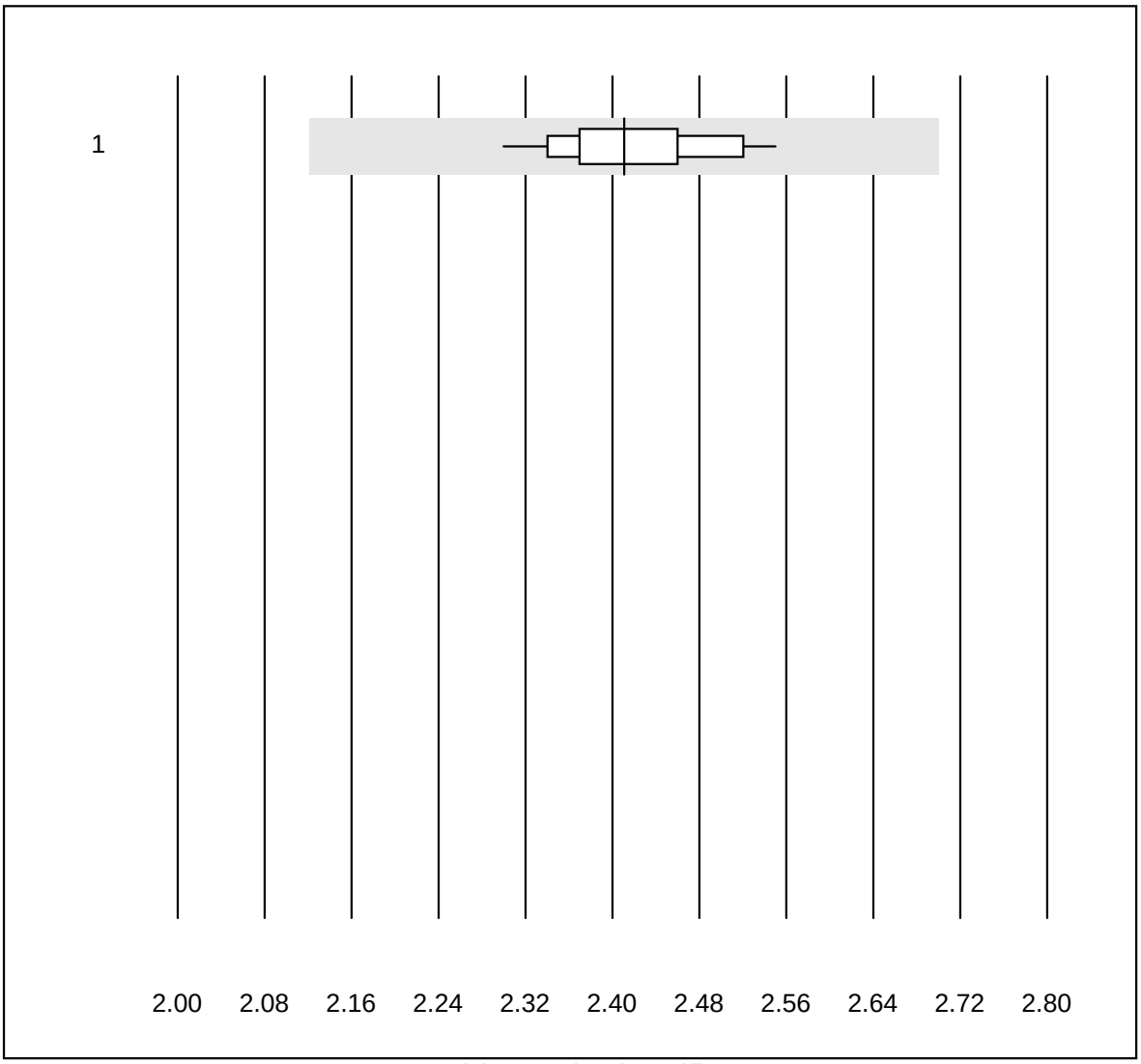


QUALAB tolerance : 10 %

Lactate-BG (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	EPOC	16	93.7	6.3	0.0	12.28	5.7	e*
2	iStat	4	100.0	0.0	0.0	11.15	0.6	e

Calcium - Urine

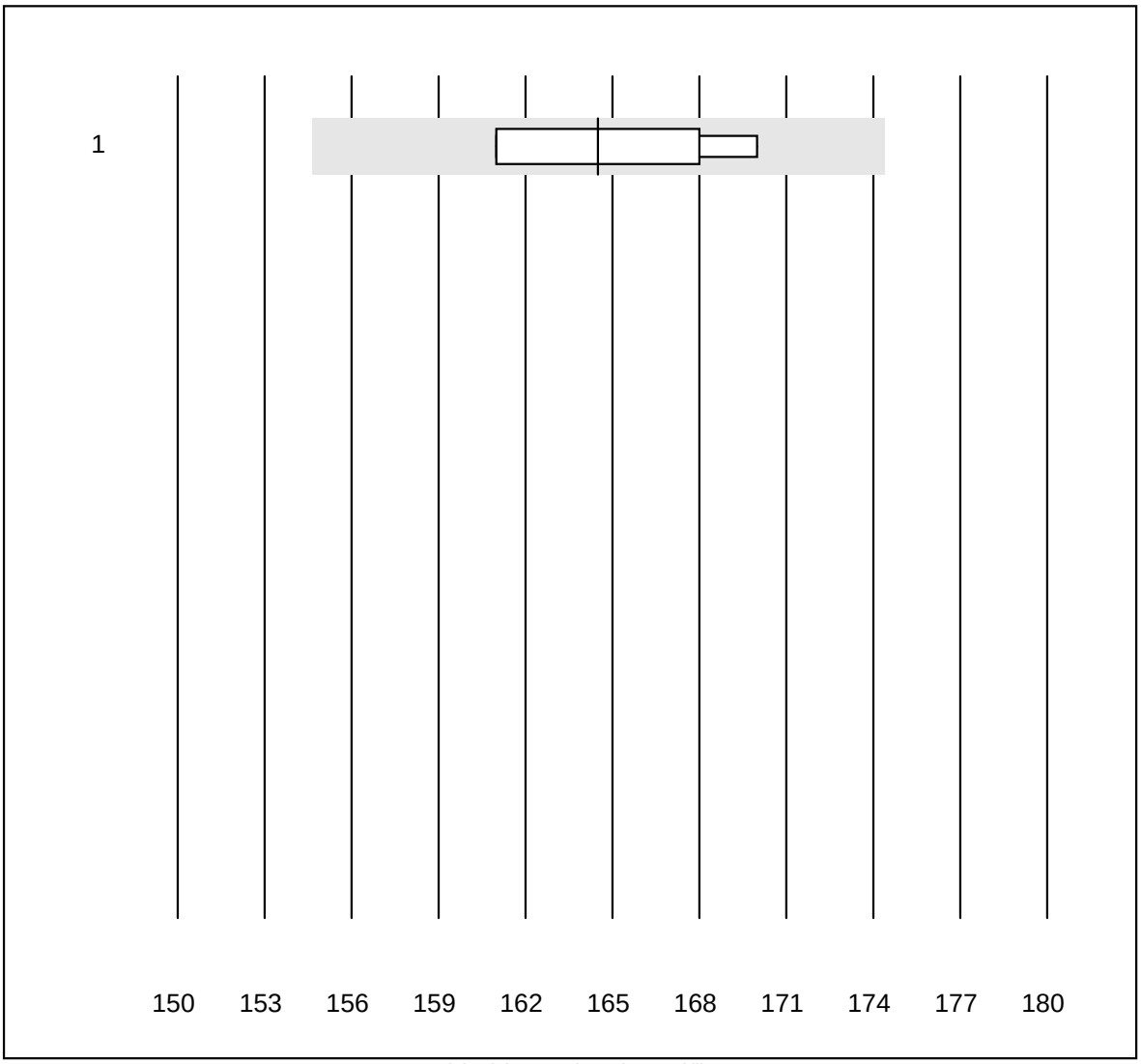


QUALAB tolerance : 12 %

Calcium - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	11	100.0	0.0	0.0	2.41	3.1	e

Chloride - Urine

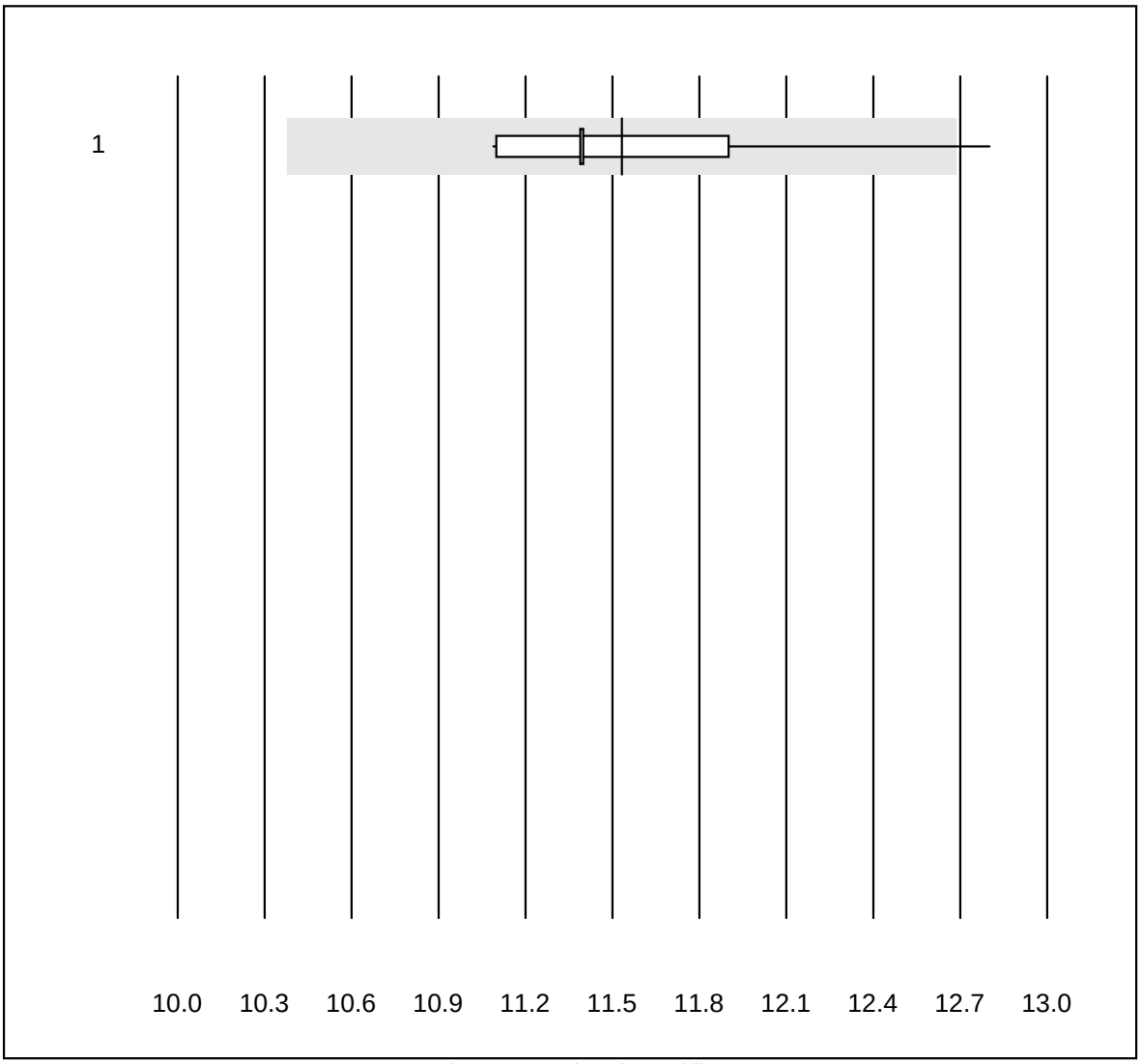


QUALAB tolerance : 6 %

Chloride - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	6	100.0	0.0	0.0	165	2.4	e*

Glucose - Urine

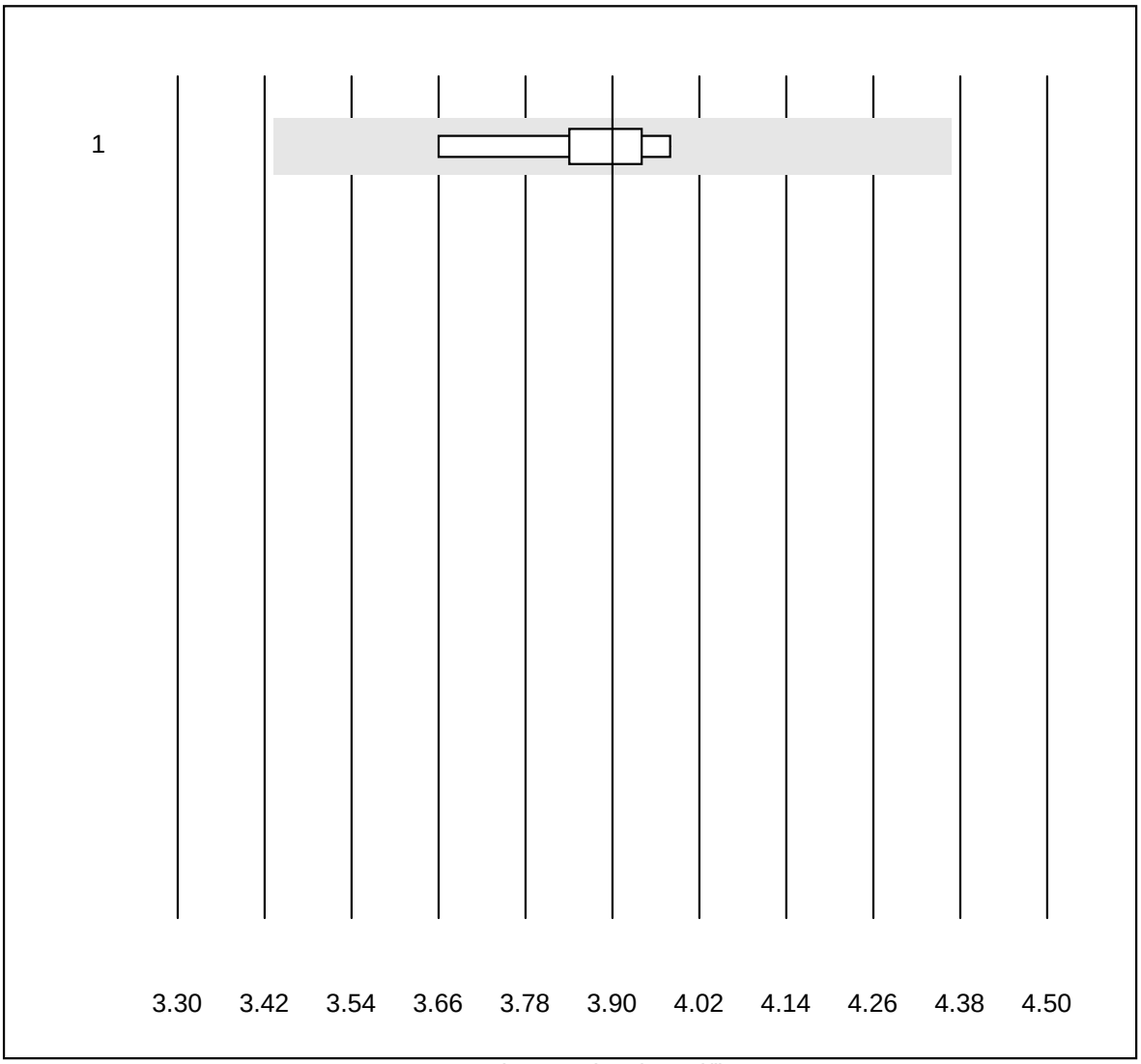


QUALAB tolerance : 10 %

Glucose - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	12	91.7	8.3	0.0	11.5	3.9	e

Magnesium - Urine

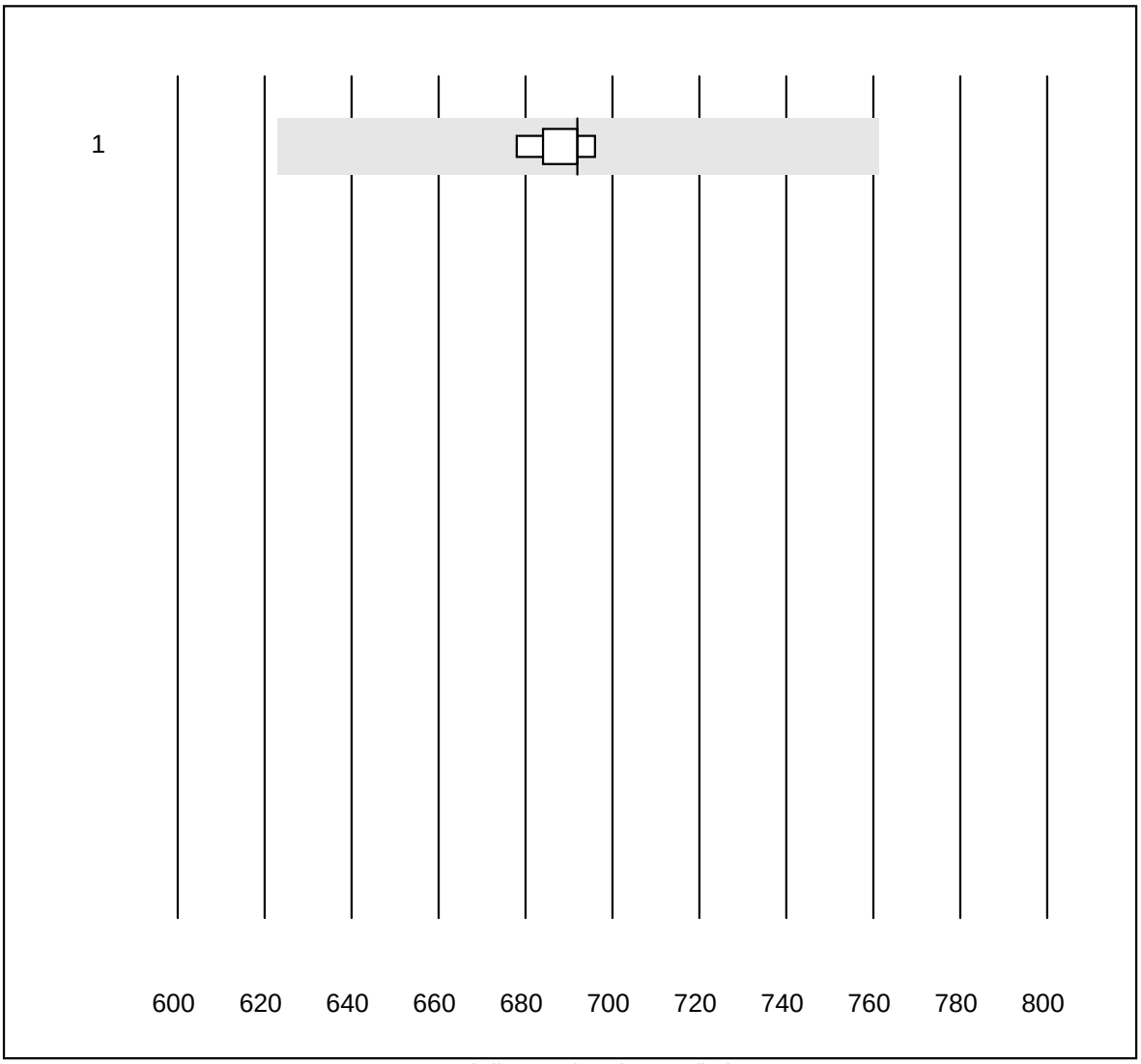


QUALAB tolerance : 12 %

Magnesium - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	6	100.0	0.0	0.0	3.9	2.9	e

Osmolality - Urine

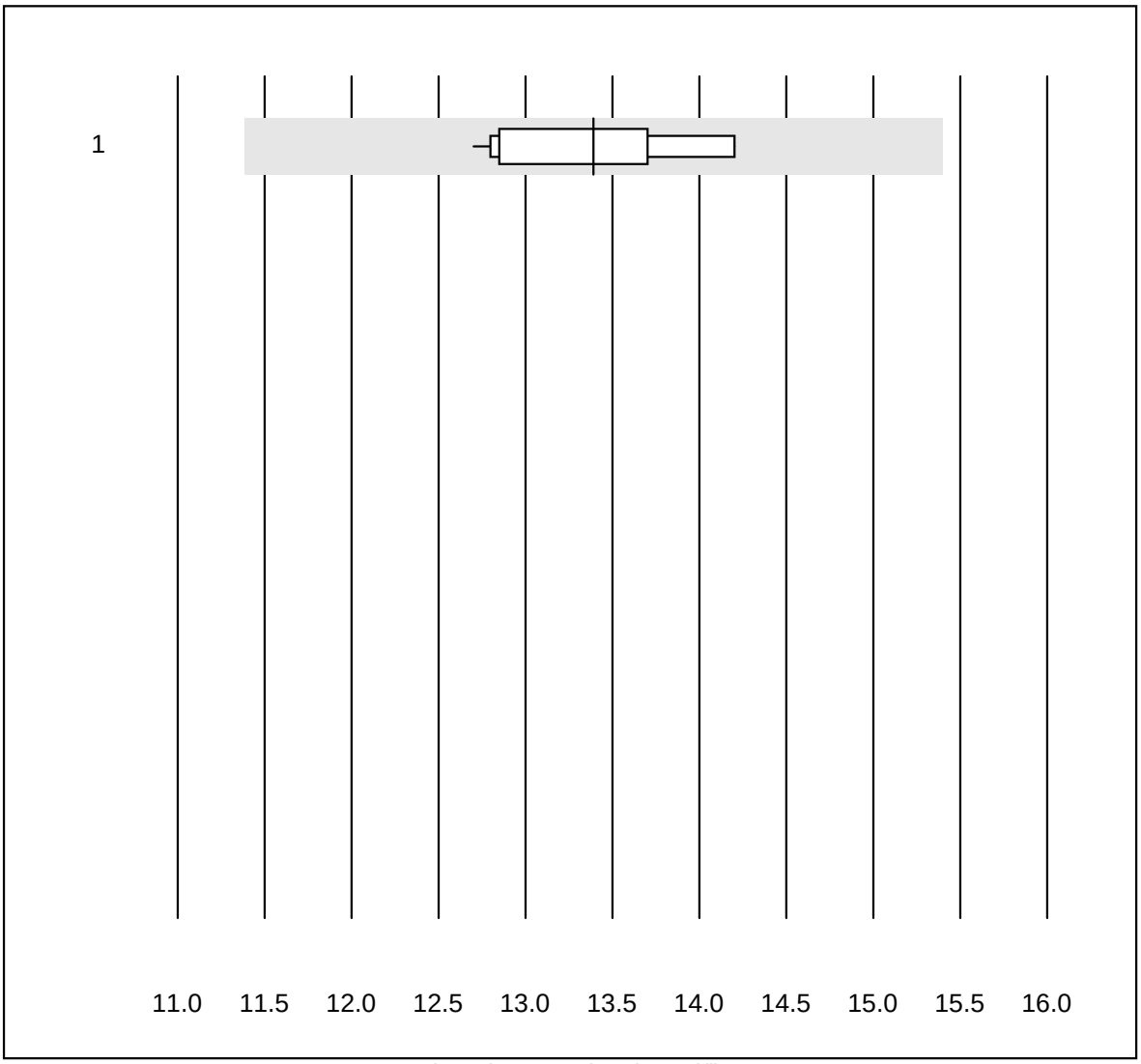


QUALAB tolerance : 10 %

Osmolality - Urine (mosm/kg)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cryoskopy	5	100.0	0.0	0.0	692	1.1	e

Phosphate - Urine

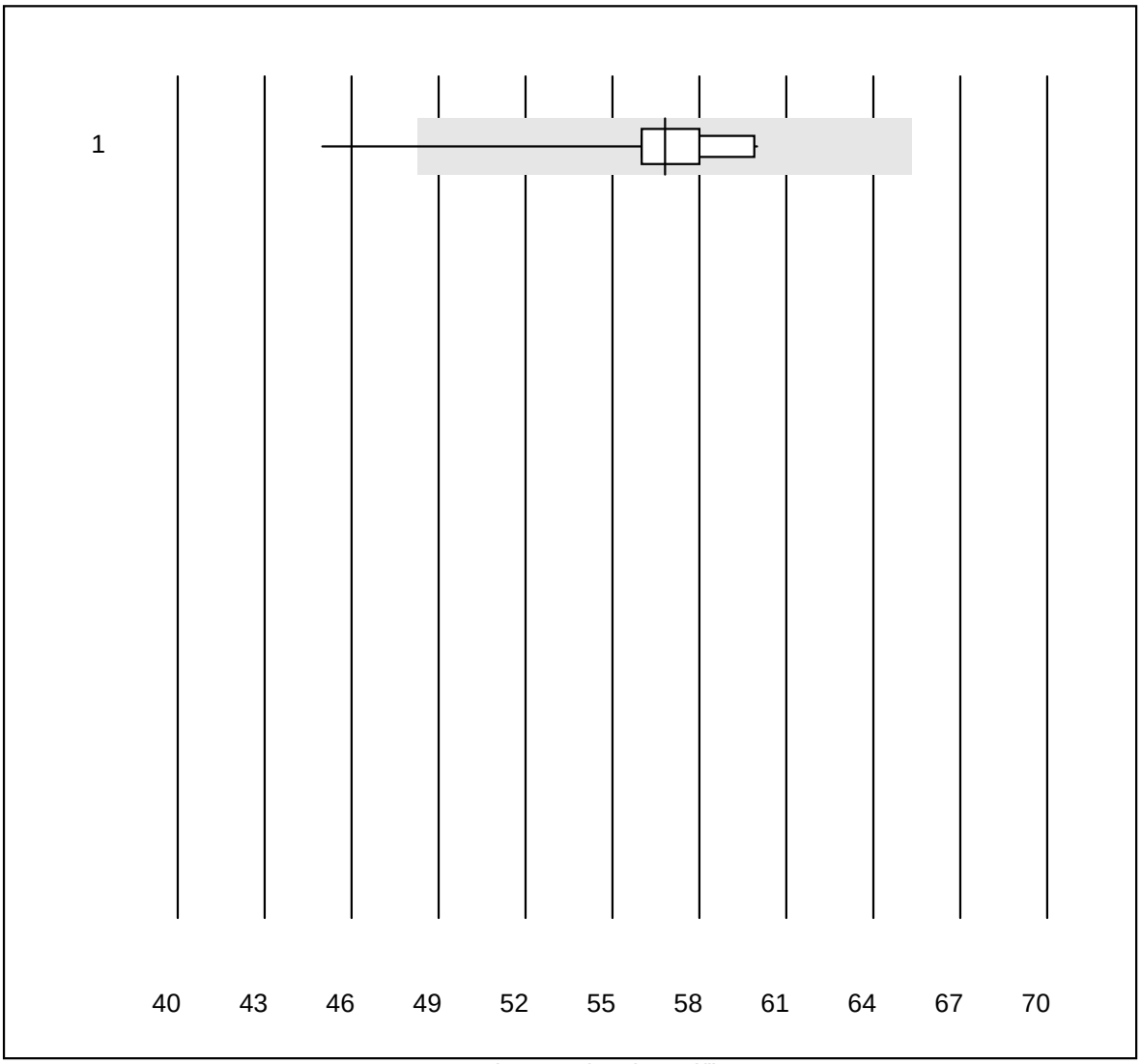


QUALAB tolerance : 15 %

Phosphate - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	12	100.0	0.0	0.0	13.4	4.1	e

Potassium - Urine

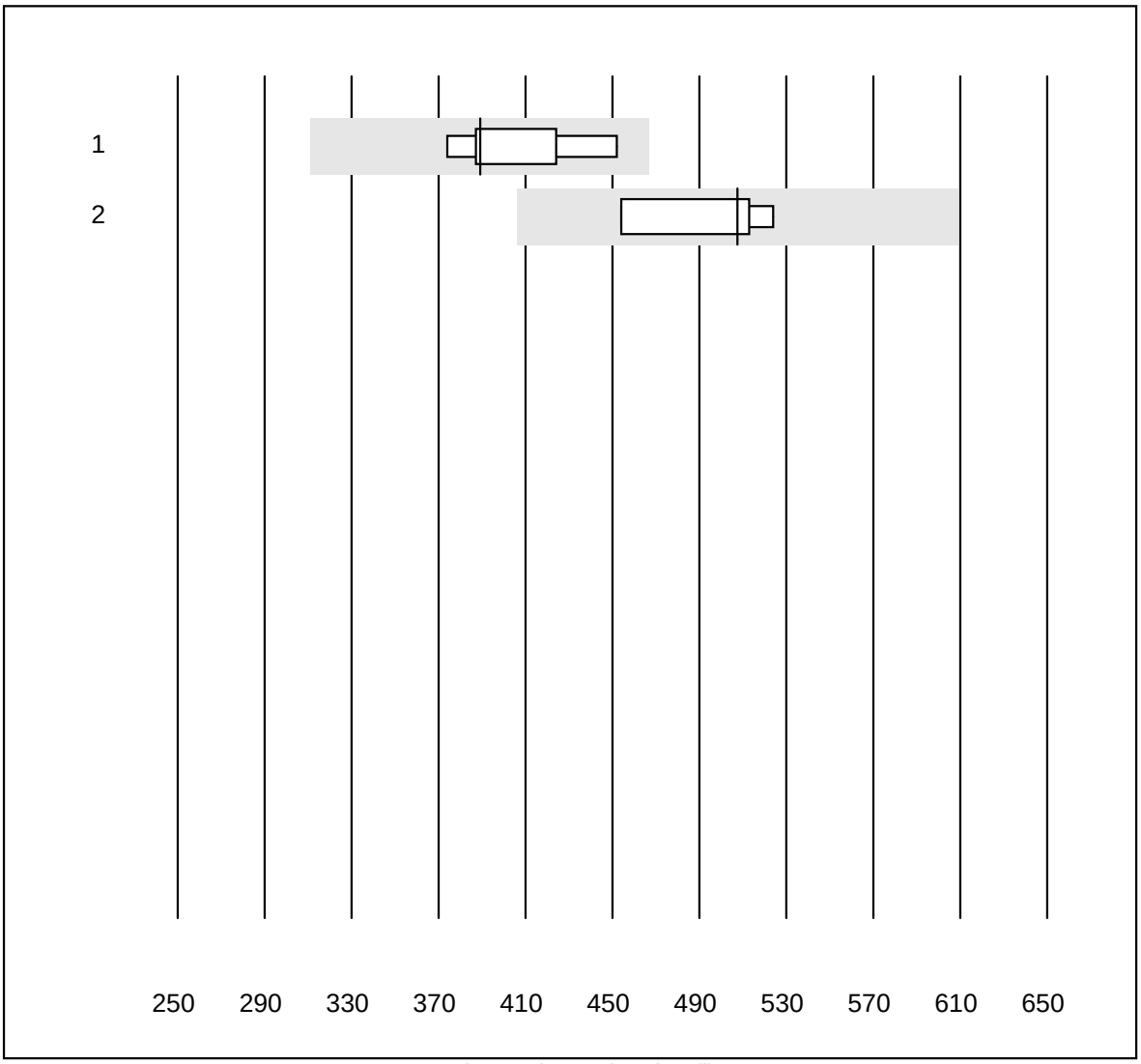


QUALAB tolerance : 15 %

Potassium - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	16	93.7	6.3	0.0	57	5.9	e

total Protein - Urine

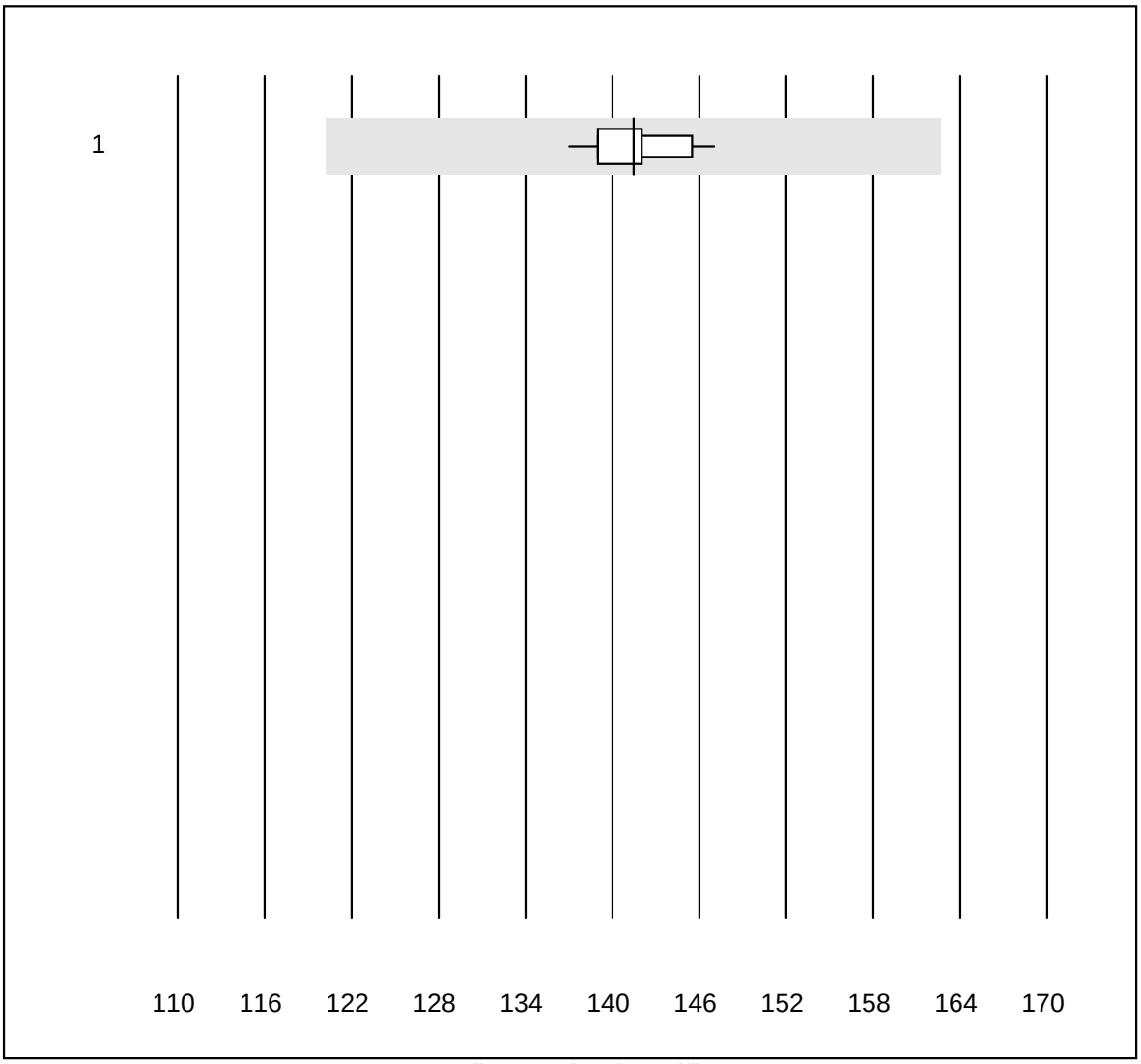


QUALAB tolerance : 20 %

total Protein - Urine (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas/Roche	9	100.0	0.0	0.0	389.0	6.7	e
2	Other methods	4	100.0	0.0	0.0	507.5	6.2	e*

Sodium - Urine

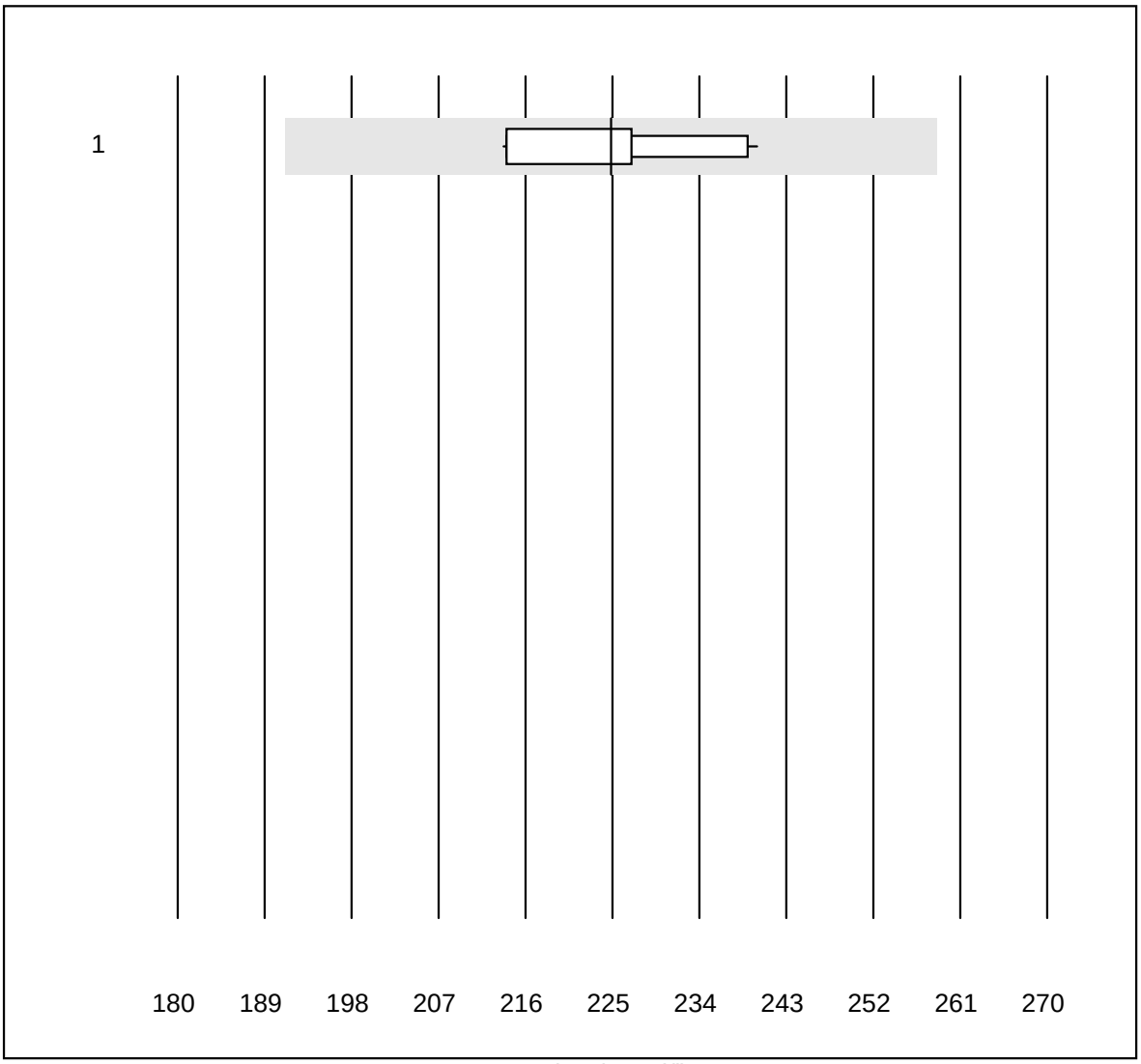


QUALAB tolerance : 15 %

Sodium - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	16	100.0	0.0	0.0	141	1.9	e

Urea - Urine

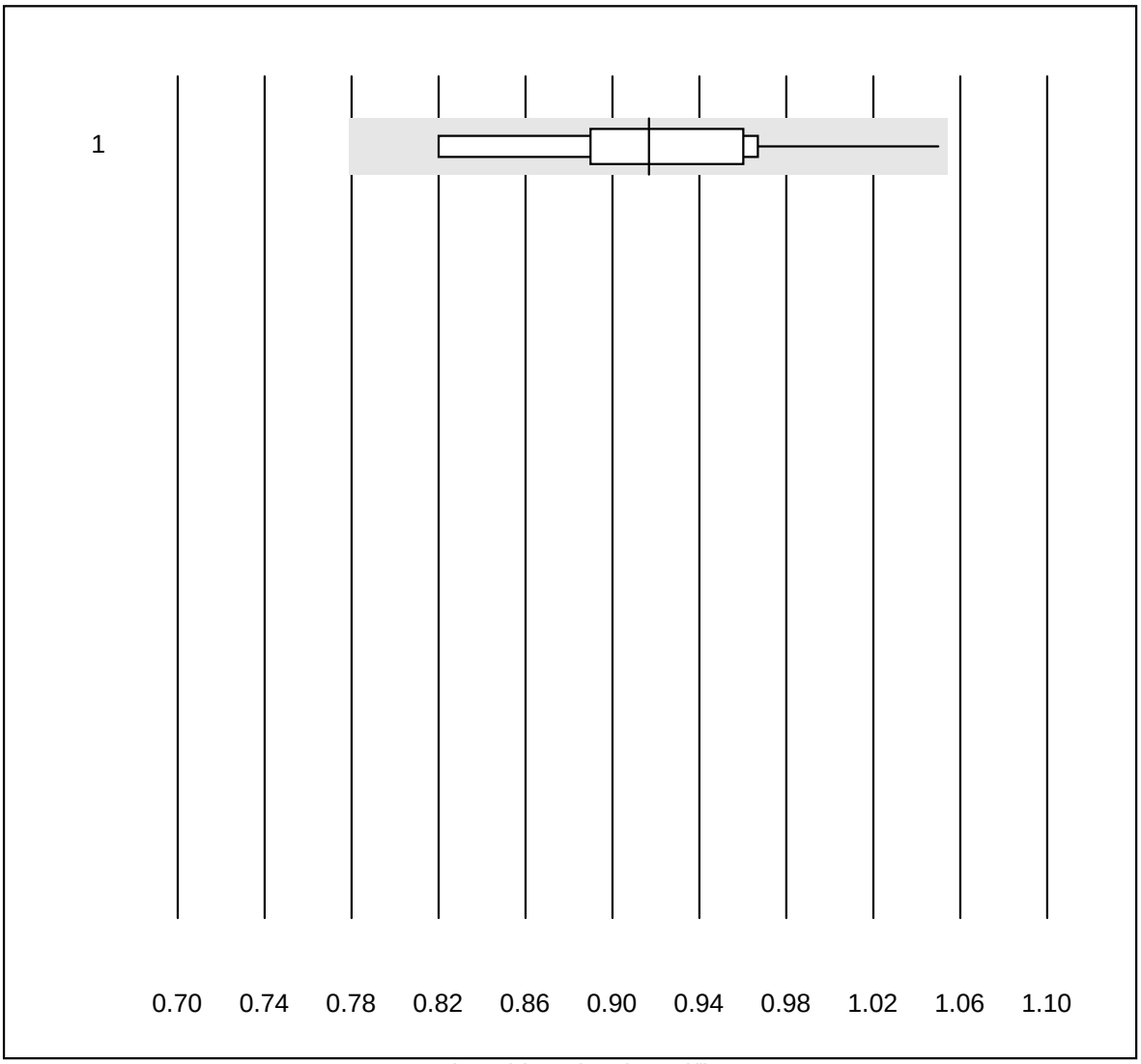


QUALAB tolerance : 15 %

Urea - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	12	100.0	0.0	0.0	225	4.2	e

Uric Acid - Urine

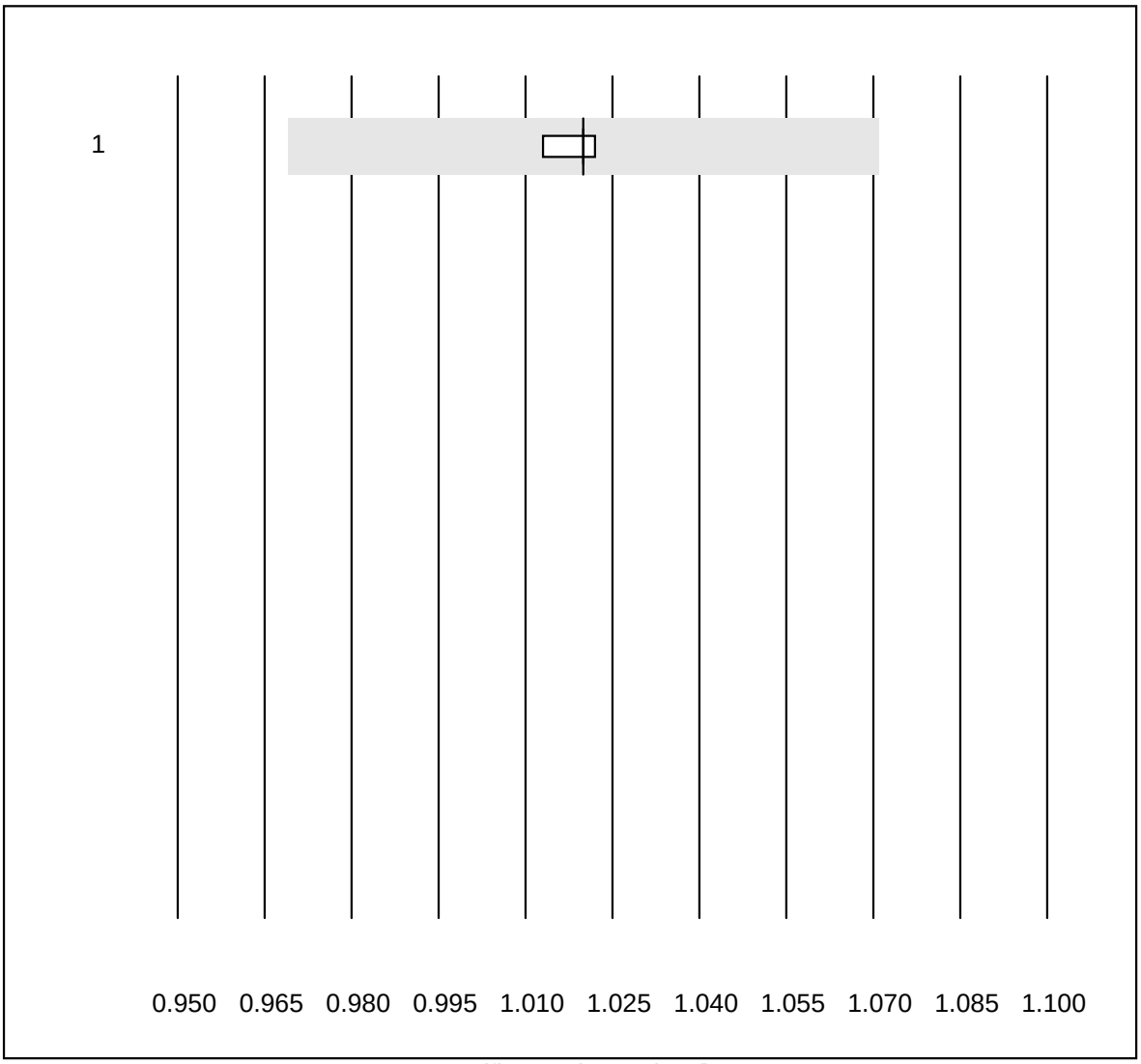


QUALAB tolerance : 15 %

Uric Acid - Urine (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Standard chemistry	11	90.9	0.0	9.1	0.92	6.9	e*

Specific Gravity - Urine

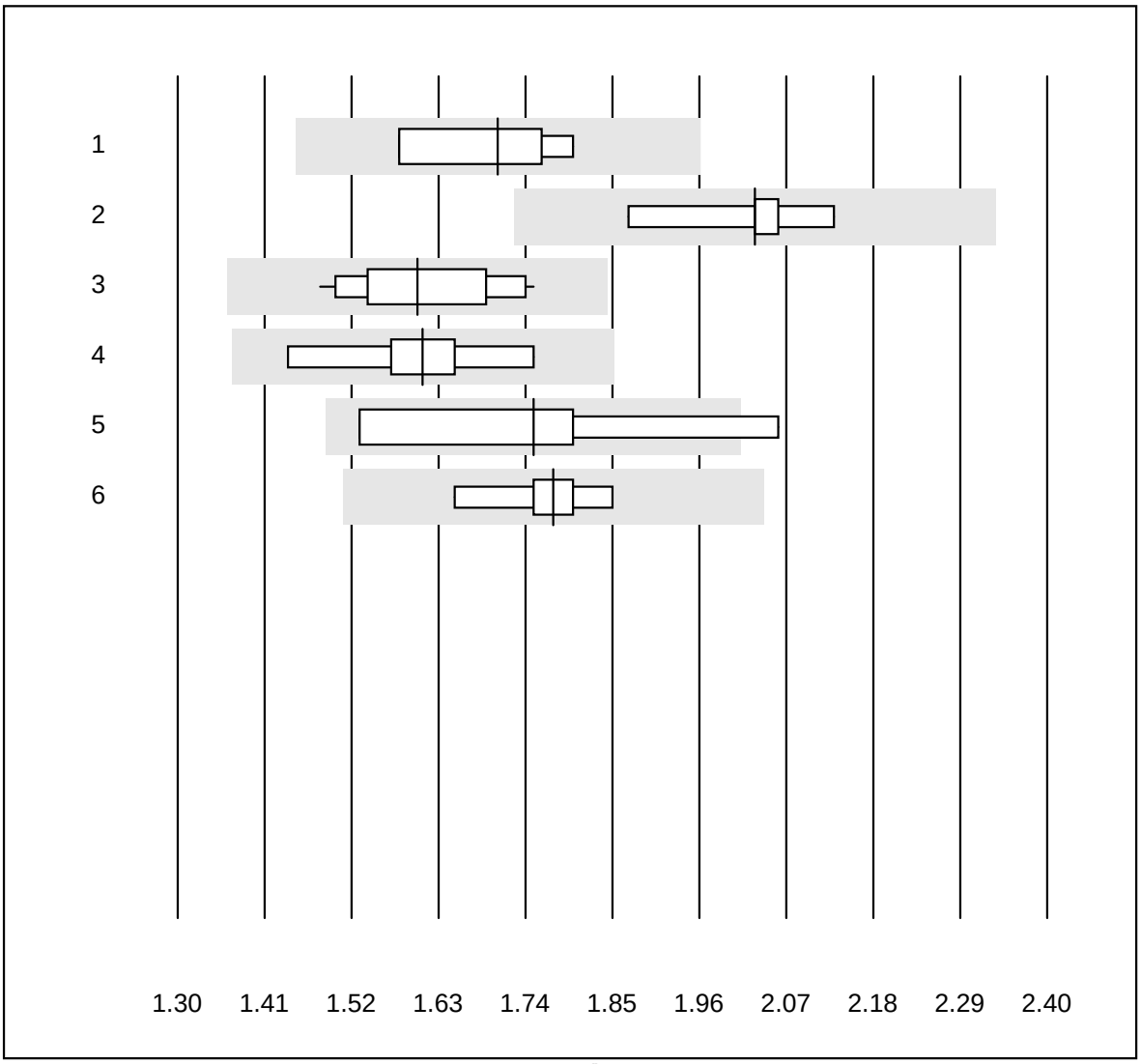


QUALAB tolerance : 5 %

Specific Gravity - Urine ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Refractometer	6	100.0	0.0	0.0	1.020	0.3	e

INR

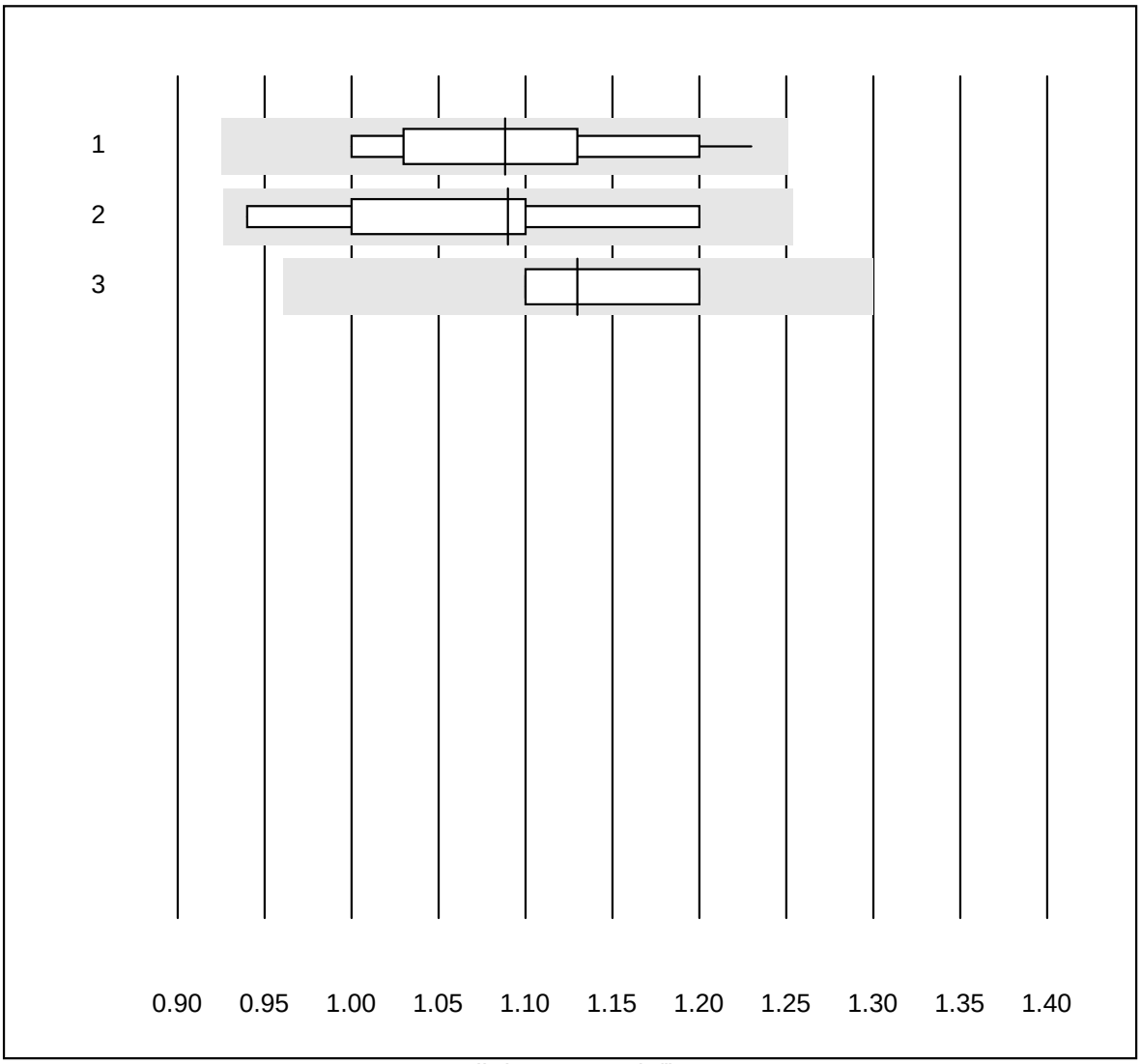


QUALAB tolerance : 15 %

INR ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Thromborel S	4	100.0	0.0	0.0	1.71	5.9	e*
2	Neoplastin Plus	5	100.0	0.0	0.0	2.03	4.7	e*
3	Innovin	17	100.0	0.0	0.0	1.60	5.4	e
4	Recombiplastin IL	6	100.0	0.0	0.0	1.61	6.4	e*
5	Other methods	4	75.0	25.0	0.0	1.75	12.5	e*
6	Neoplastin R	8	100.0	0.0	0.0	1.78	3.3	e

Fibrinogen OA

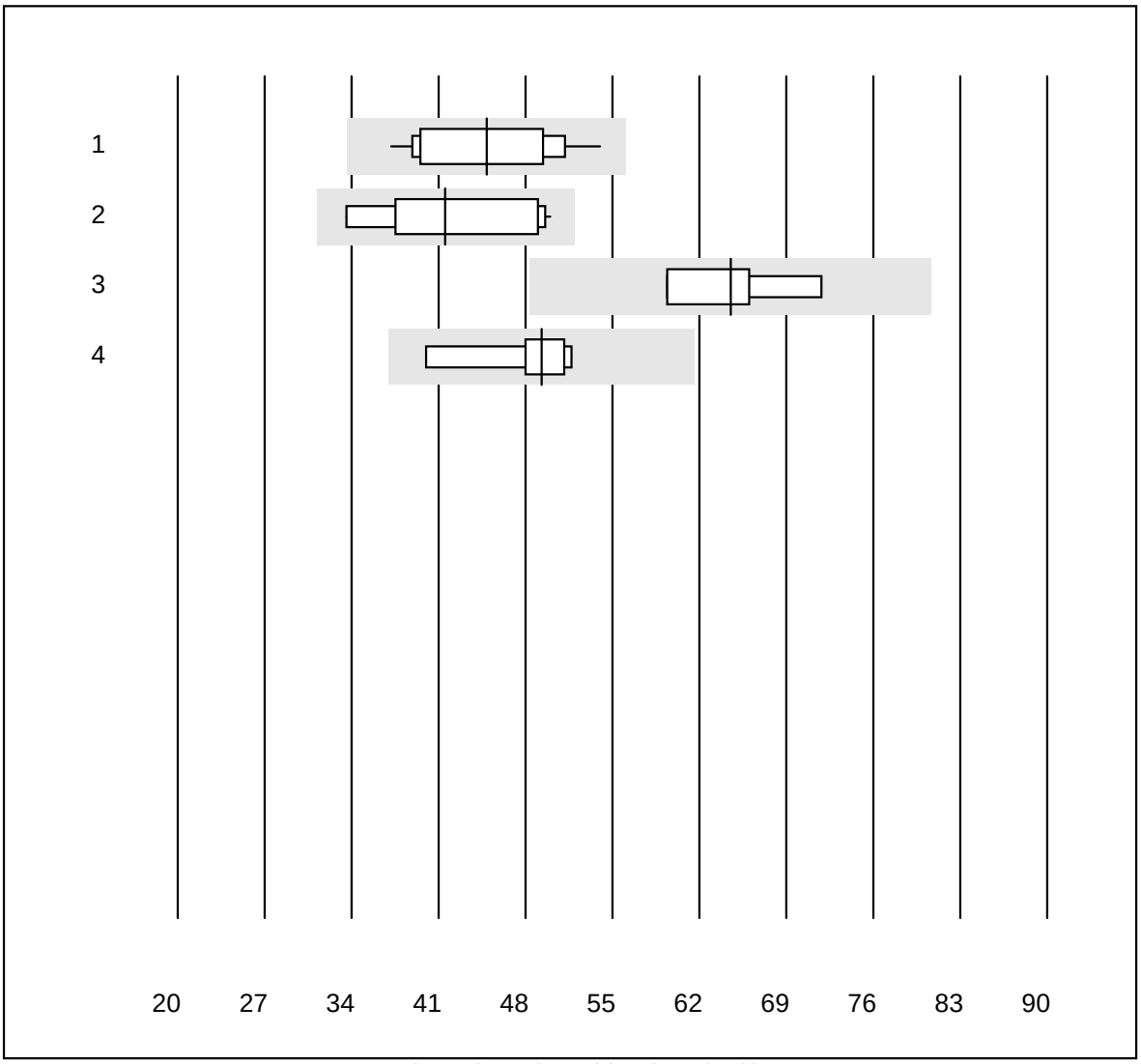


QUALAB tolerance : 15 %

Fibrinogen OA (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Other methods	11	100.0	0.0	0.0	1.09	6.9	e*
2	Siemens Thrombin	6	100.0	0.0	0.0	1.09	8.4	e*
3	Stago/STA	7	85.7	0.0	14.3	1.13	4.0	e

Activated Prothrombin Time

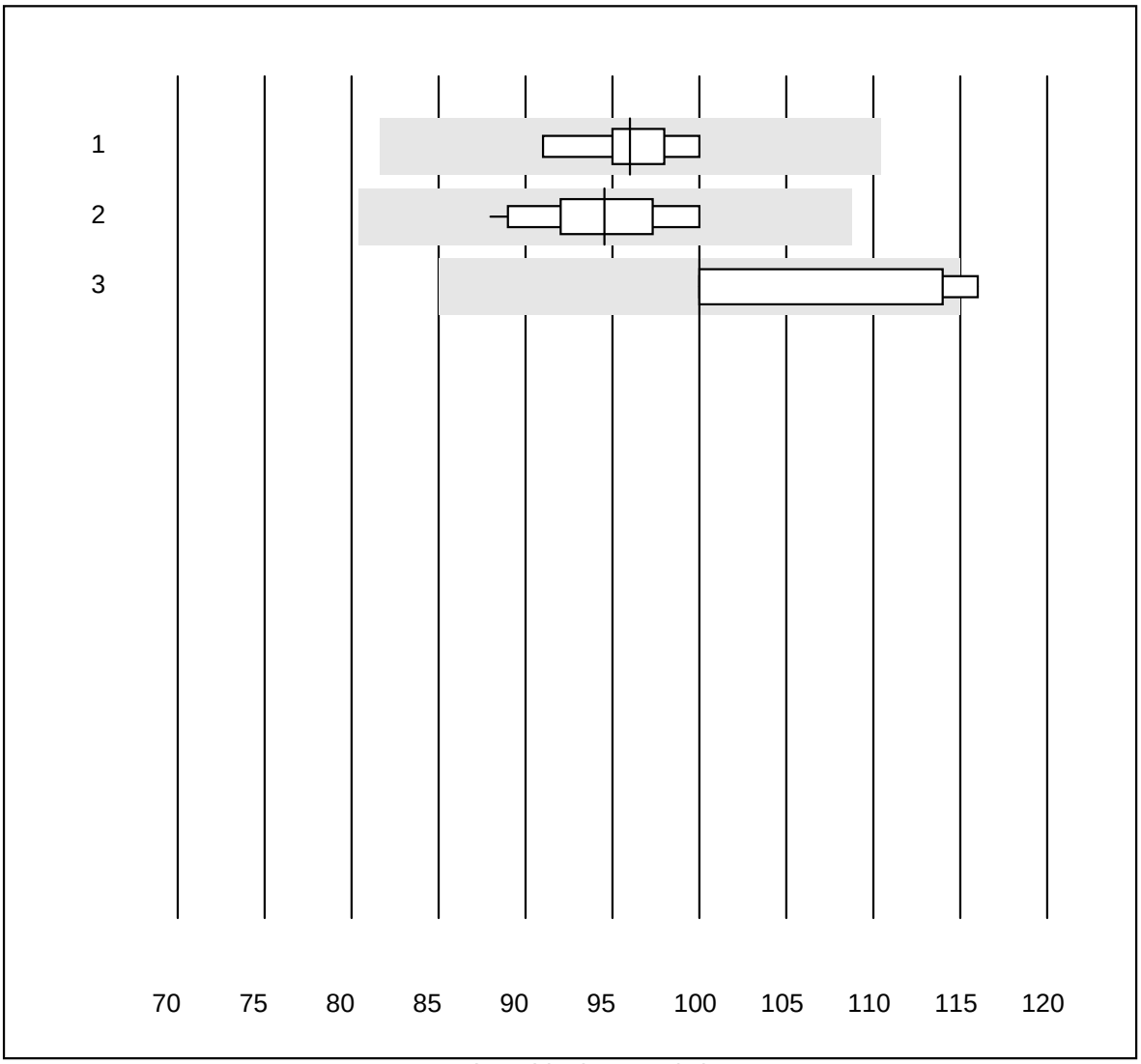


QUALAB tolerance : 25 %

Activated Prothrombin Time (Sek)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Other methods	13	92.3	0.0	7.7	44.9	12.8	e*
2	Actin FS	10	100.0	0.0	0.0	41.6	14.7	e*
3	Pathromtin SL	4	100.0	0.0	0.0	64.5	8.1	e*
4	Stago/STA	6	100.0	0.0	0.0	49.3	9.2	e*

Prothrombin time NT

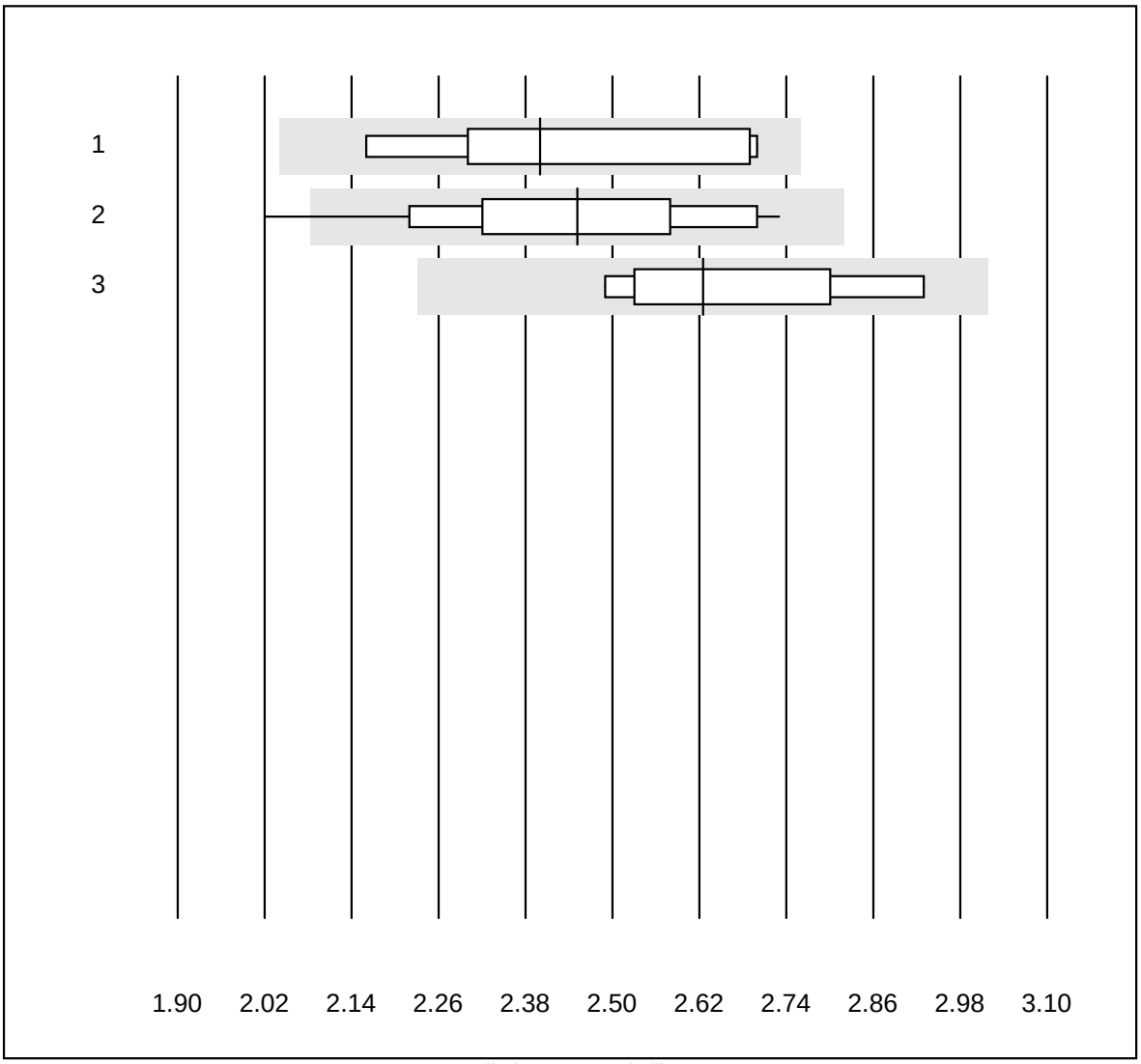


QUALAB tolerance : 15 %

Prothrombin time NT (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Neoplastin R	6	100.0	0.0	0.0	96	3.2	e
2	Innovin	12	100.0	0.0	0.0	95	4.5	e
3	Recombiplastin IL	7	85.7	14.3	0.0	100	6.6	a

Fibrinogen N

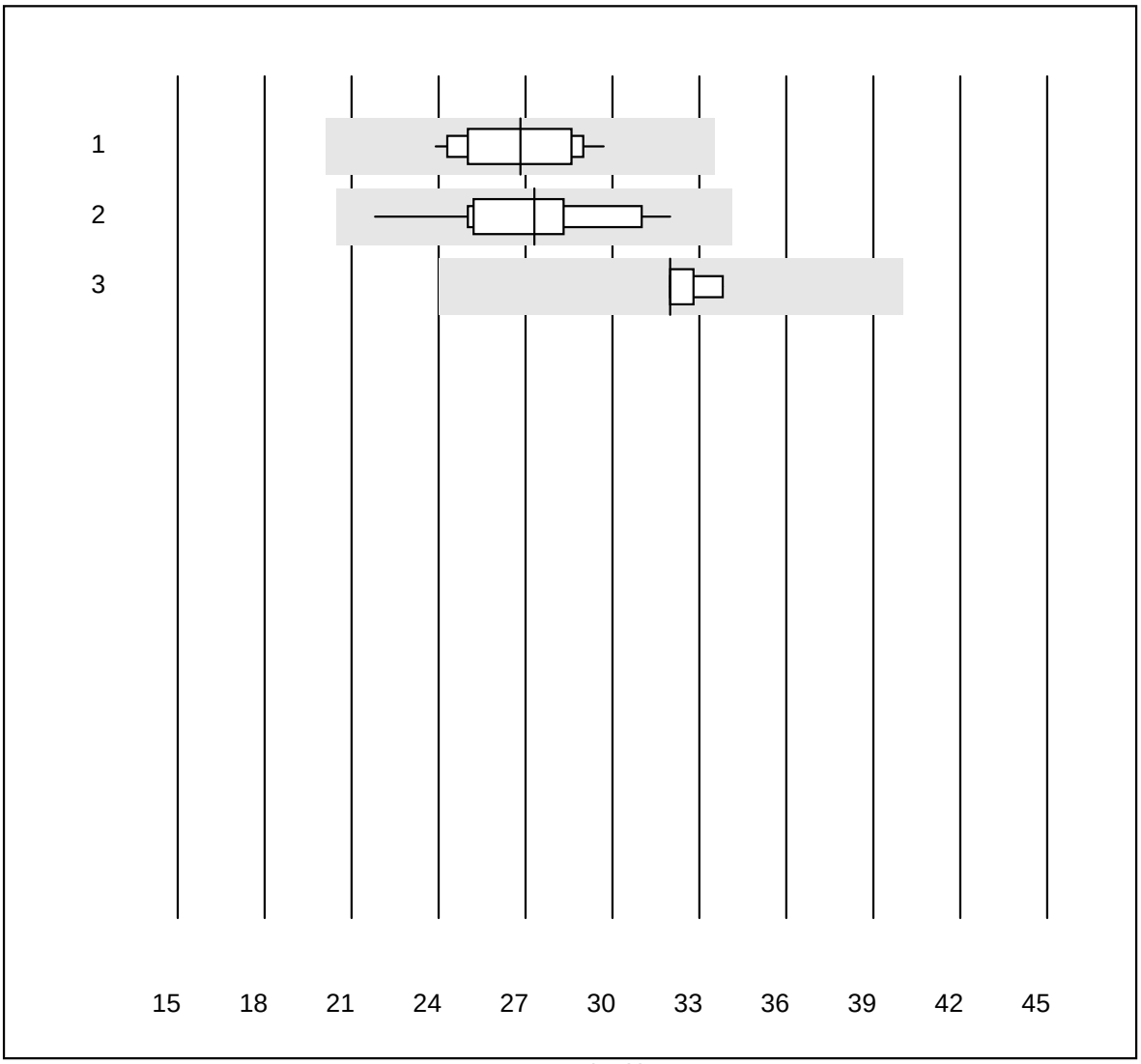


QUALAB tolerance : 15 %

Fibrinogen N (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Siemens Thrombin	7	85.7	0.0	14.3	2.40	8.7	e*
2	Other methods	13	84.6	7.7	7.7	2.45	8.4	e*
3	Stago/STA	8	100.0	0.0	0.0	2.63	5.7	e*

aPTT N

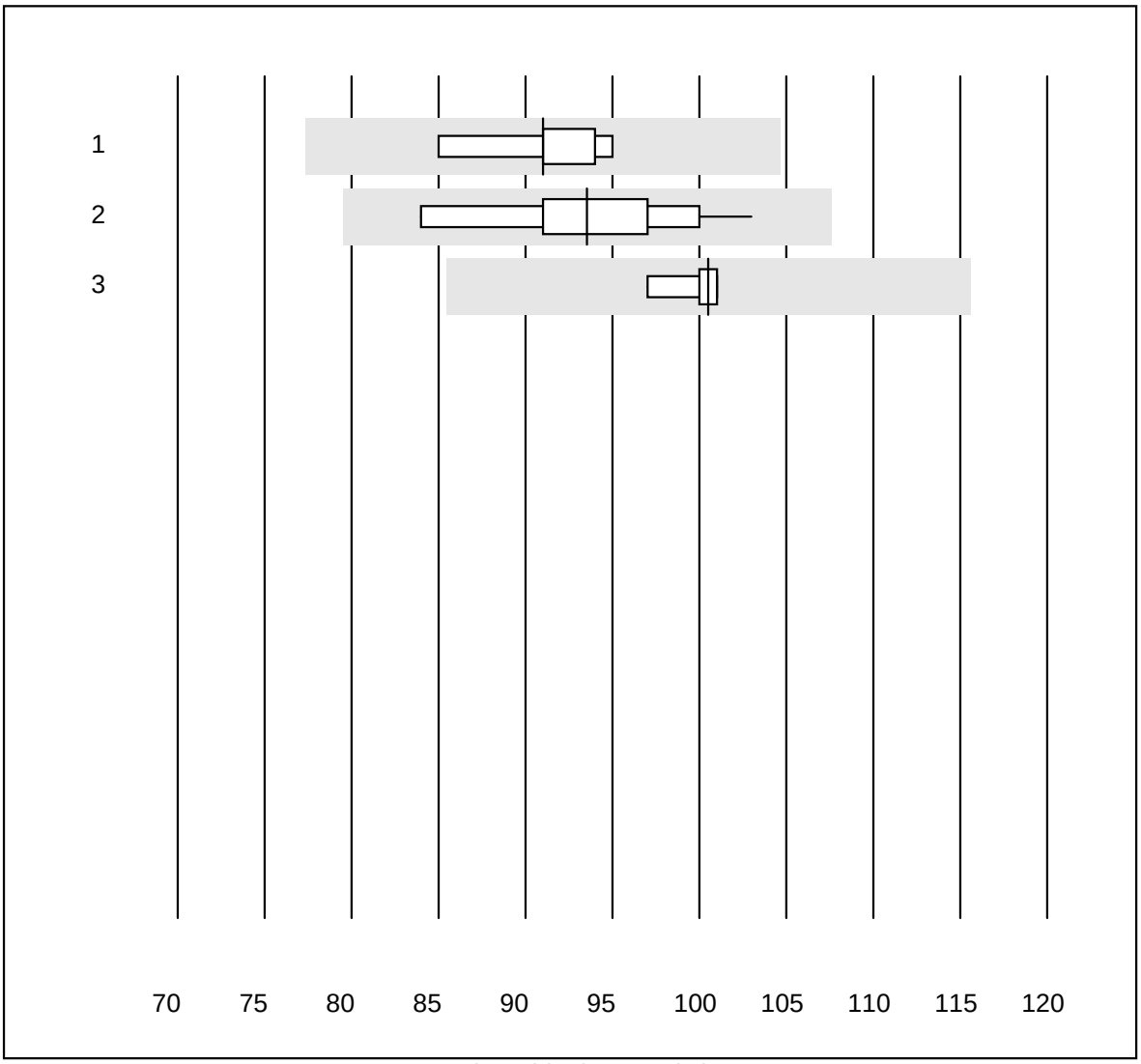


QUALAB tolerance : 25 %

aPTT N (Sek)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Actin FS	11	100.0	0.0	0.0	26.8	7.2	e
2	Other methods	13	100.0	0.0	0.0	27.3	10.5	e
3	Stago/STA	5	100.0	0.0	0.0	32.0	2.4	e

Prothrombin time HT

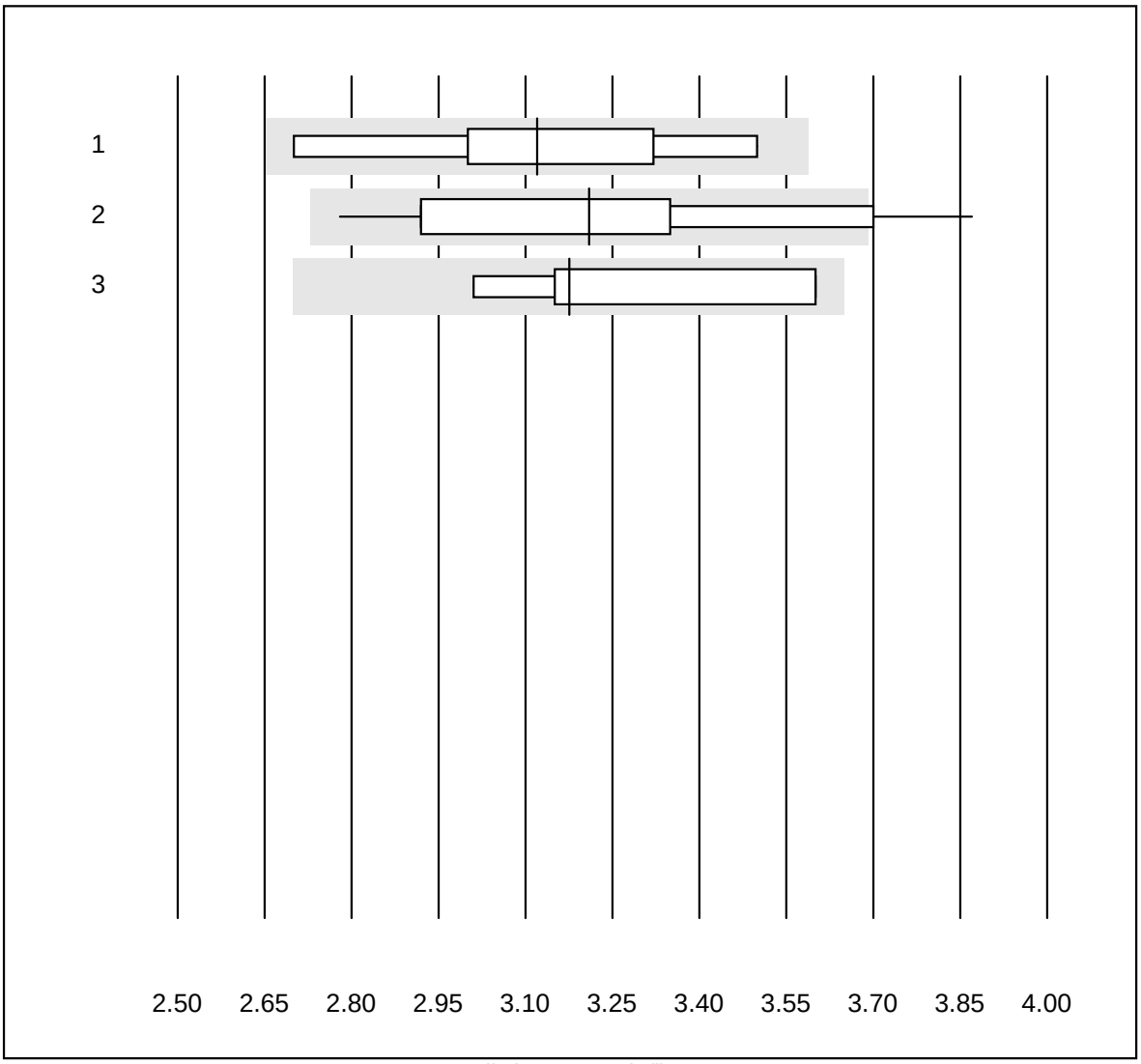


QUALAB tolerance : 15 %

Prothrombin time HT (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Neoplastin R	5	100.0	0.0	0.0	91	4.5	e*
2	Innovin	10	100.0	0.0	0.0	94	6.2	e*
3	Recombiplastin IL	6	100.0	0.0	0.0	101	1.5	e

Fibrinogen H

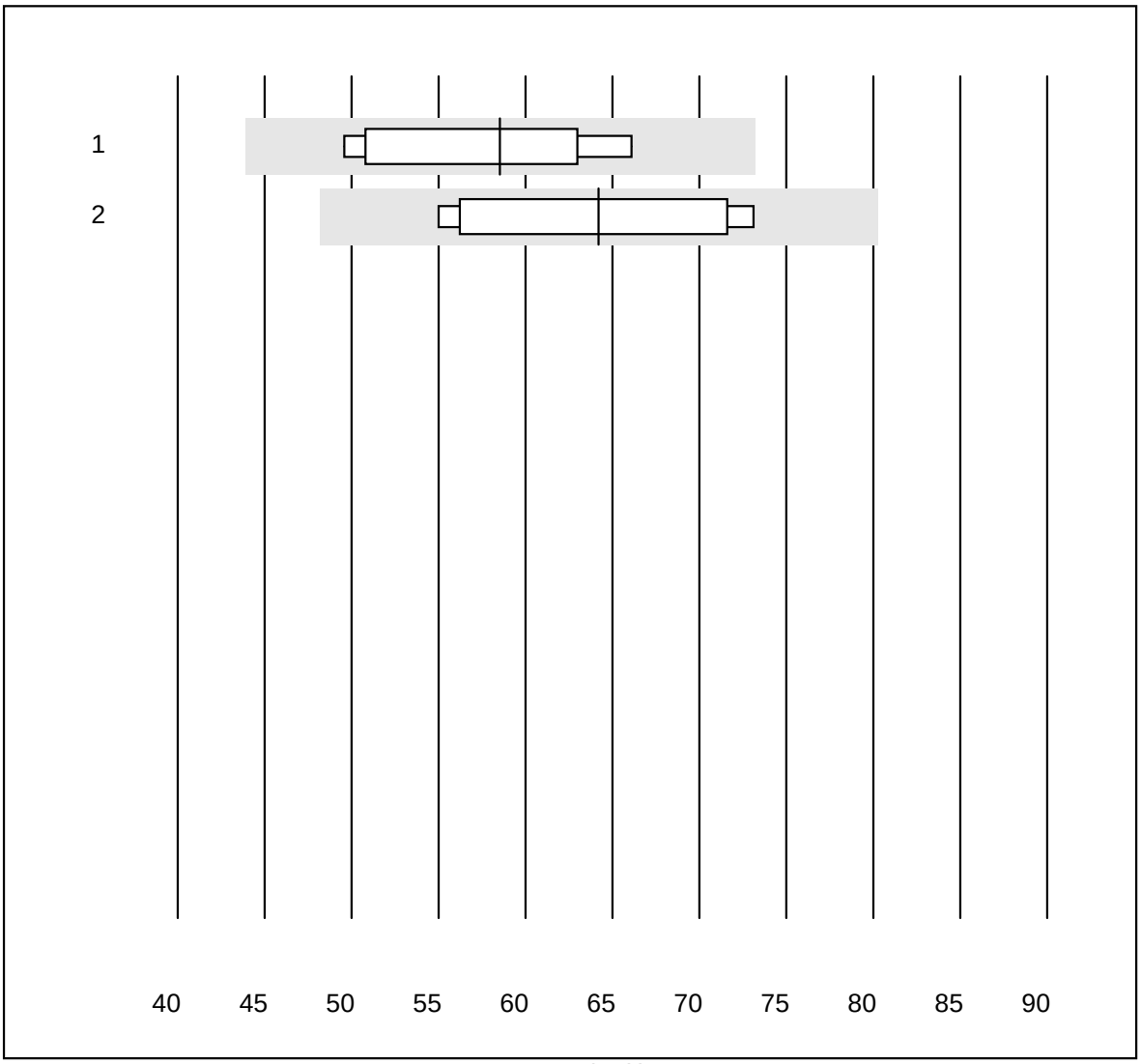


QUALAB tolerance : 15 %

Fibrinogen H (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Siemens Thrombin	6	100.0	0.0	0.0	3.12	8.8	e*
2	Other methods	12	75.0	16.7	8.3	3.21	10.4	e*
3	Stago/STA	6	100.0	0.0	0.0	3.18	7.3	e*

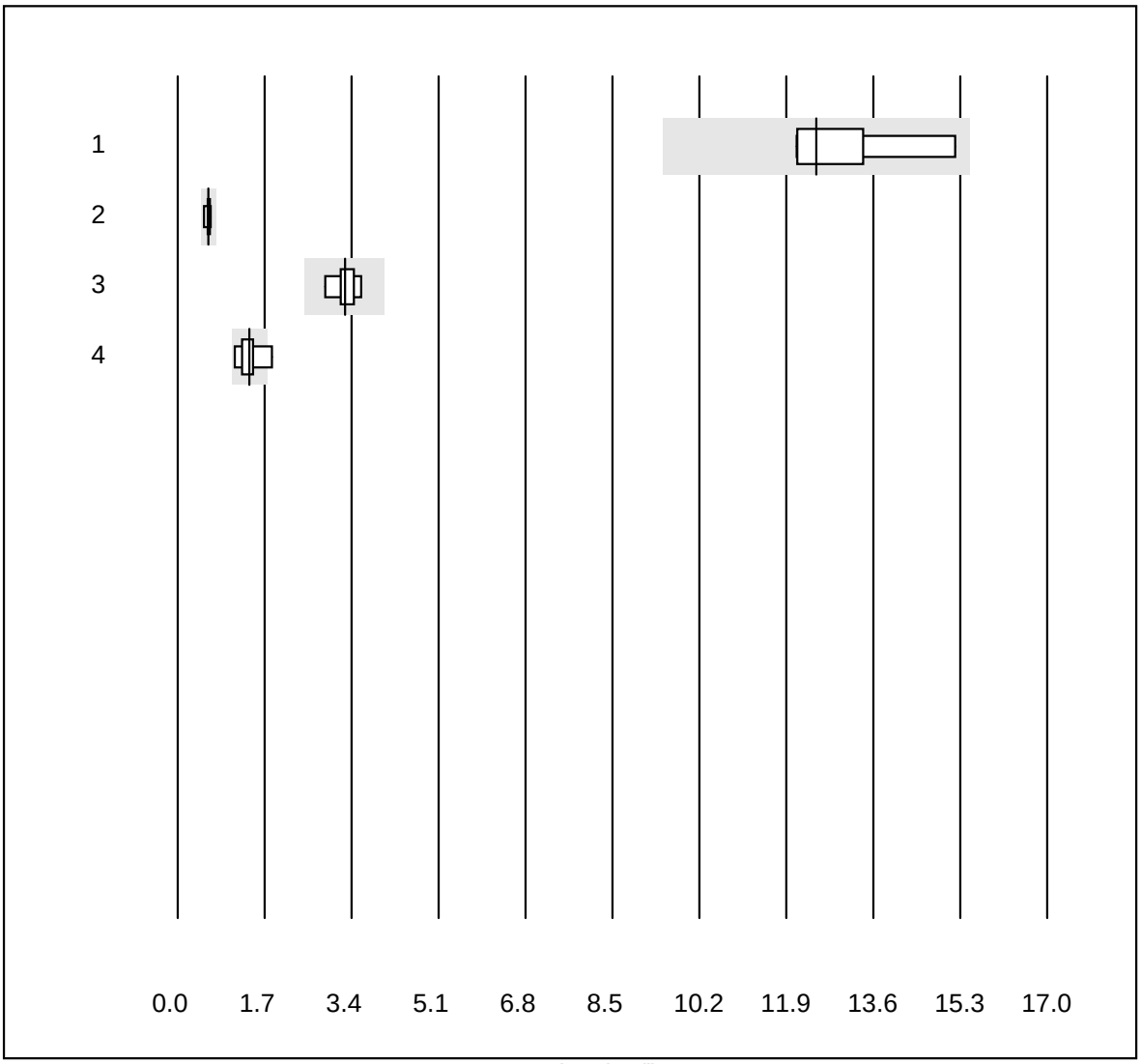
aPTT H



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Actin FS	8	100.0	0.0	0.0	58.6	11.0	e*
2	Other methods	10	90.0	0.0	10.0	64.2	11.5	e*

Troponin I

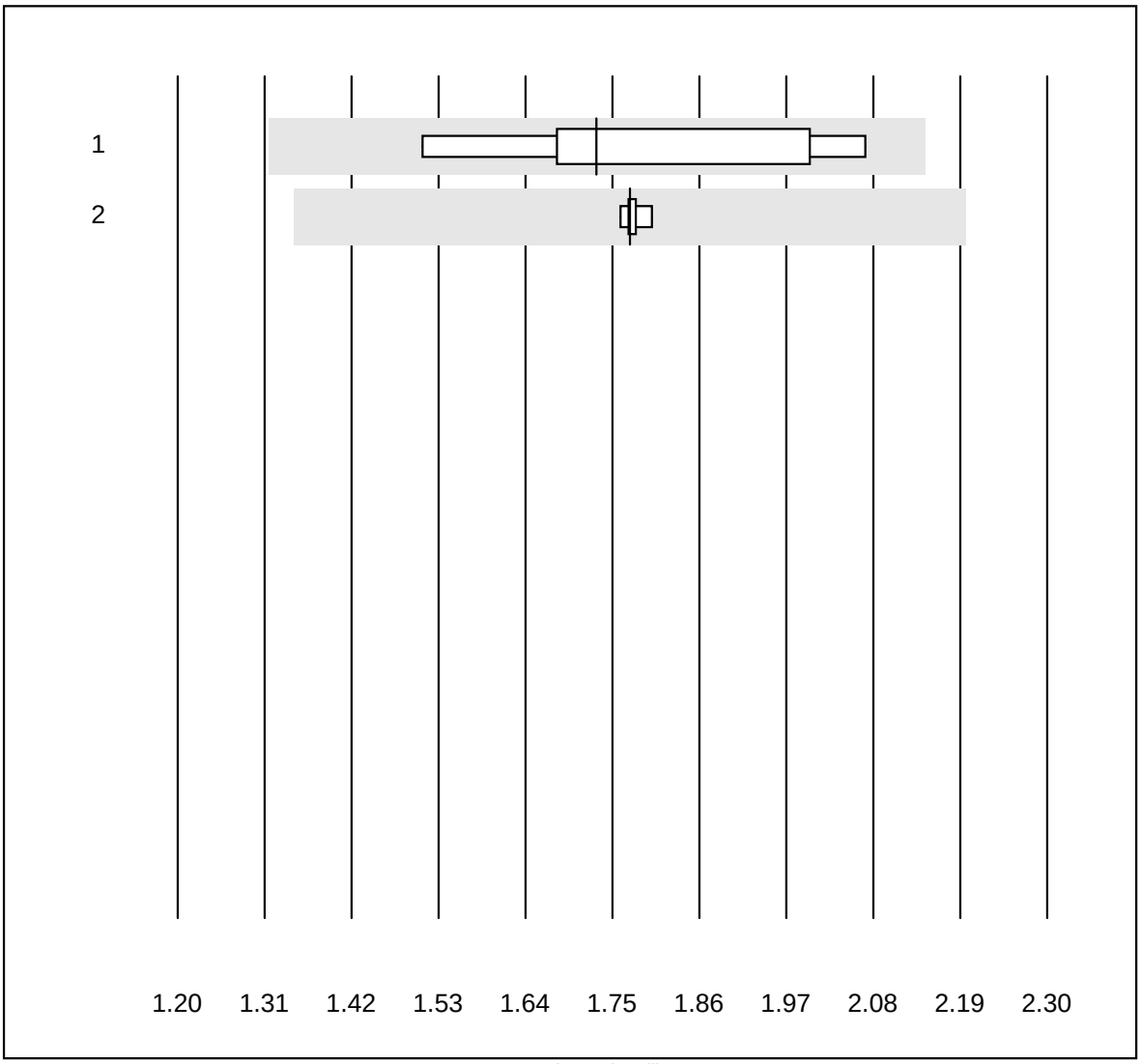


QUALAB tolerance : 24 %

Troponin I (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Vidas	6	100.0	0.0	0.0	12.5	9.1	e*
2	AQT 90 FLEX	6	100.0	0.0	0.0	0.6	7.2	e*
3	ADVIA Centaur XP/CP	6	100.0	0.0	0.0	3.3	7.3	e*
4	Eurolyser	8	62.5	12.5	25.0	1.4	18.4	e*

Troponin T

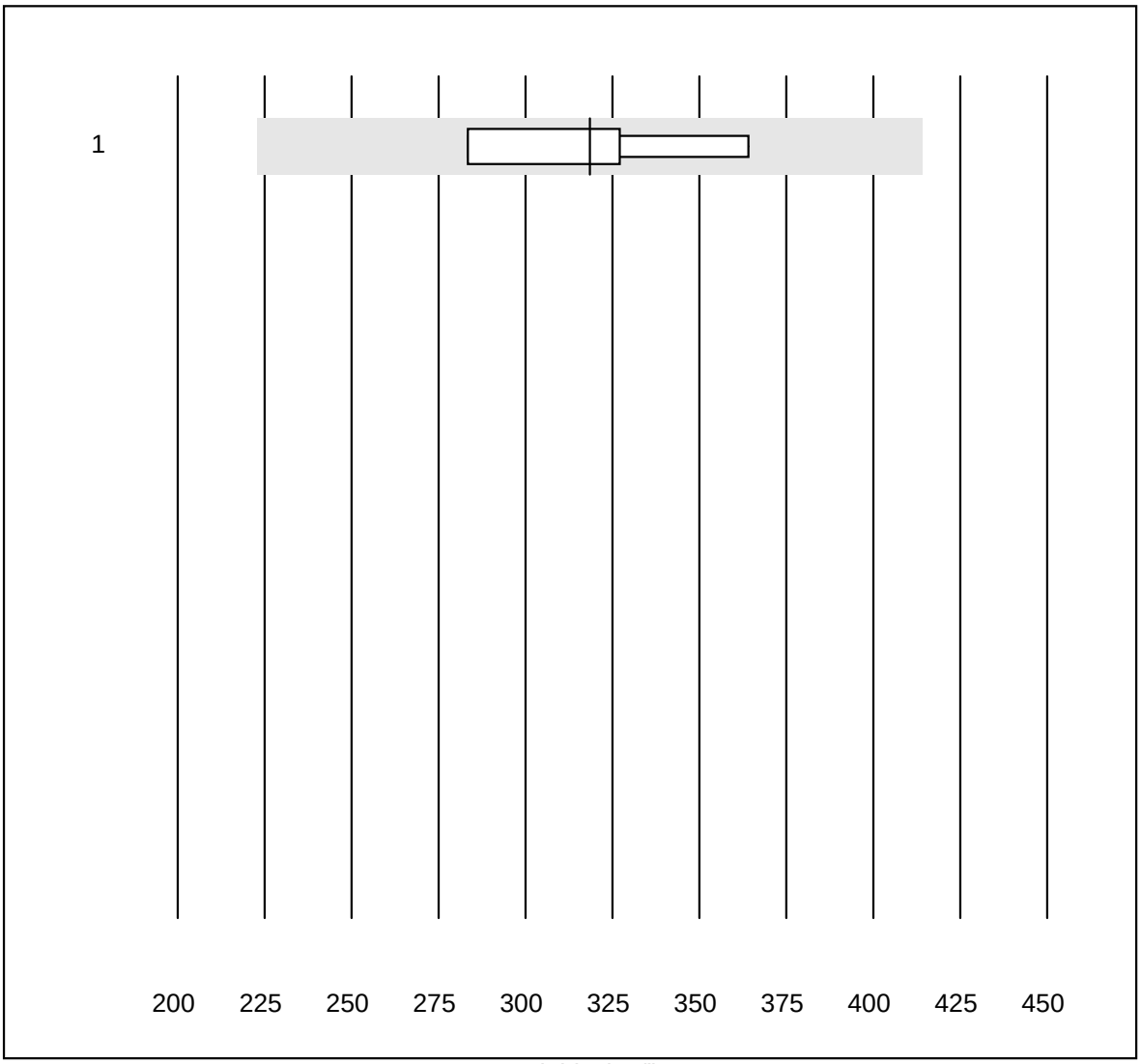


QUALAB tolerance : 24 %

Troponin T (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas hs	5	100.0	0.0	0.0	1.73	12.9	e*
2	Cobas hs STAT	5	100.0	0.0	0.0	1.77	0.8	e

Myoglobin

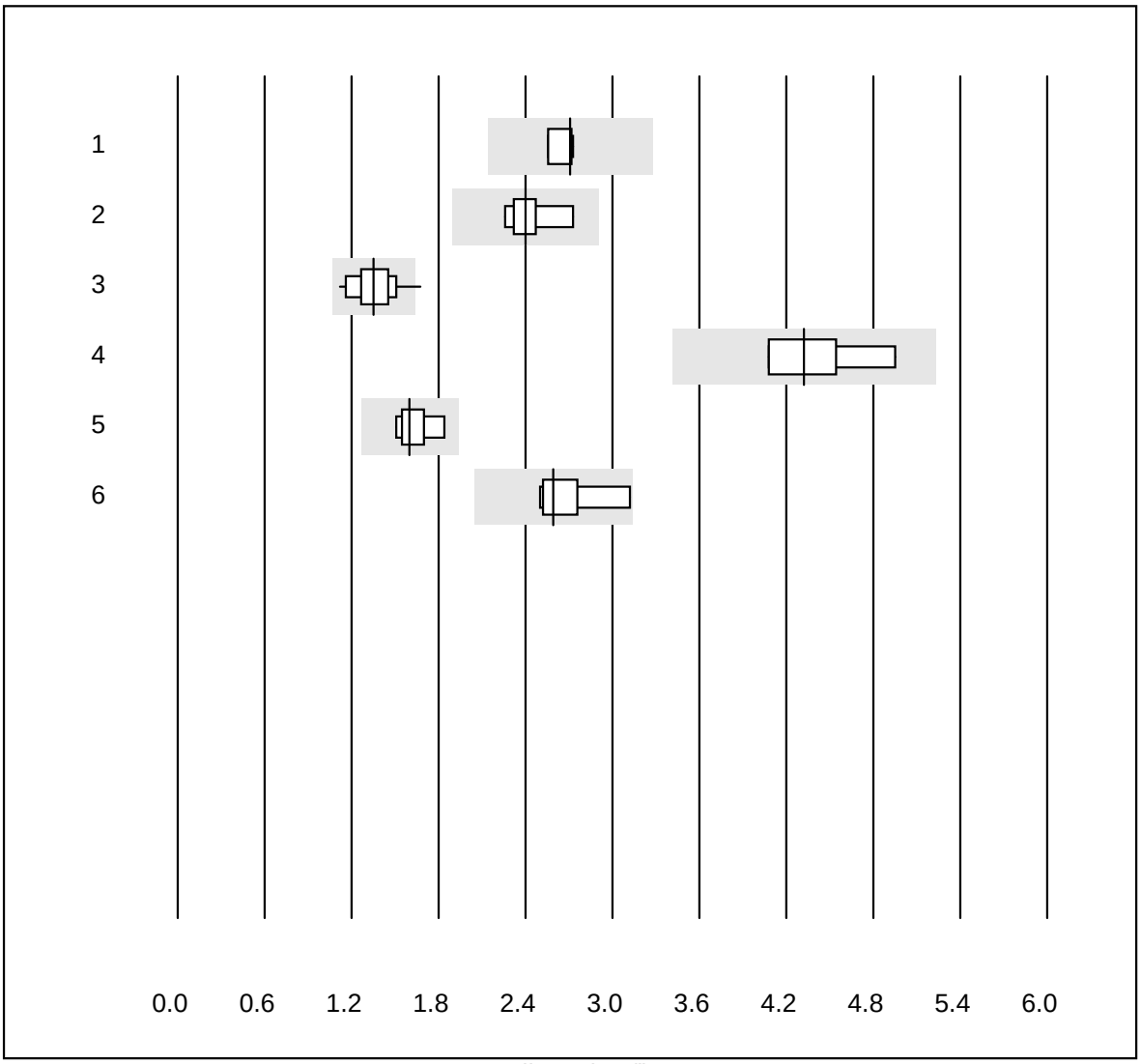


QUALAB tolerance : 30 %

Myoglobin (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	318.5	10.5	e*

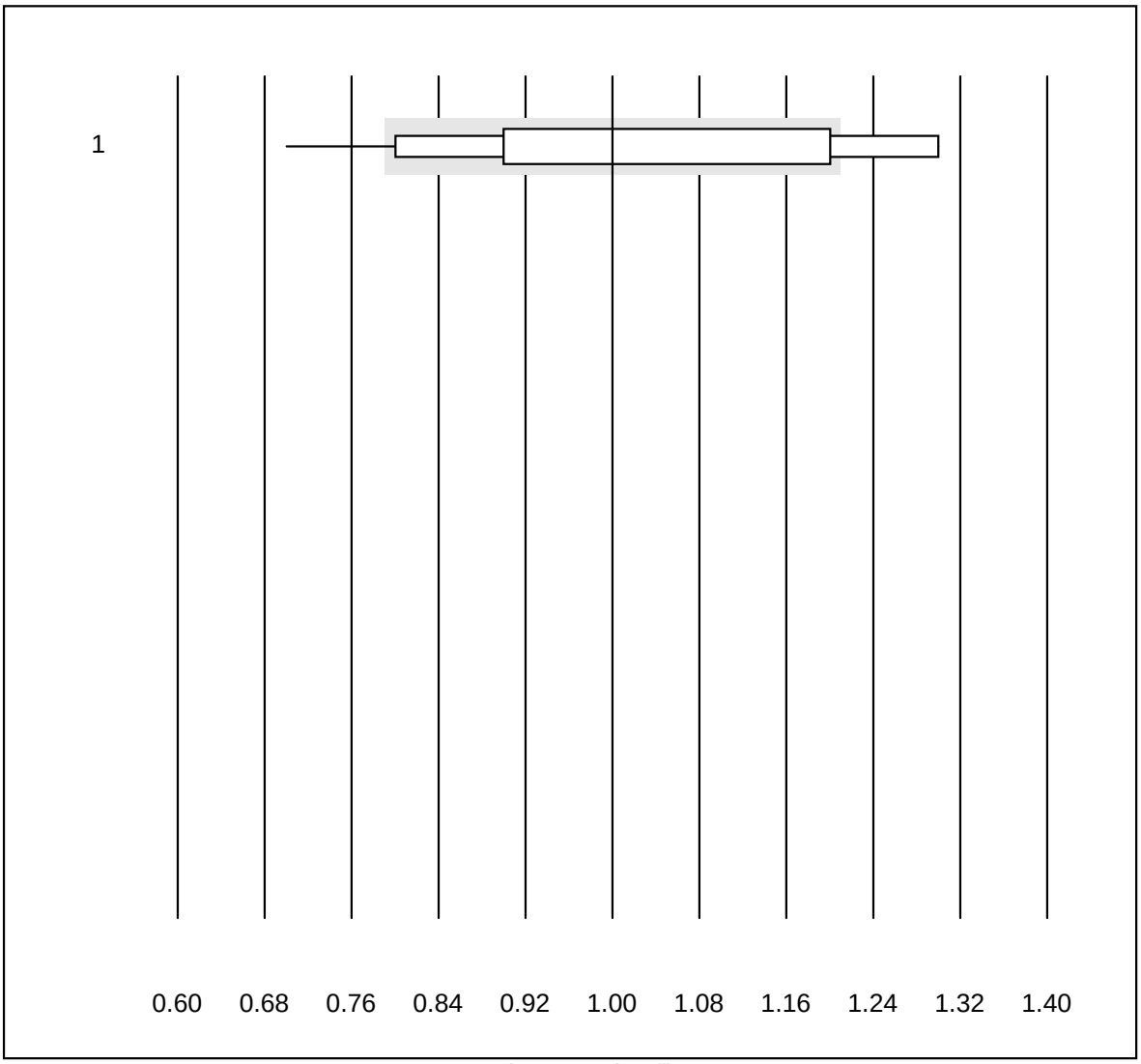
D-dimer



QUALAB tolerance : 21 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas (Zitratplasma)	4	100.0	0.0	0.0	2.71	3.0	e
2	STA Liatest	9	88.9	0.0	11.1	2.40	6.8	e
3	Eurolyser	18	66.6	5.6	27.8	1.35	11.5	e*
4	ACL	4	100.0	0.0	0.0	4.32	9.4	e*
5	AQT 90 FLEX	7	100.0	0.0	0.0	1.60	6.9	e*
6	Vidas	9	100.0	0.0	0.0	2.59	7.9	e*

D-Dimer NC

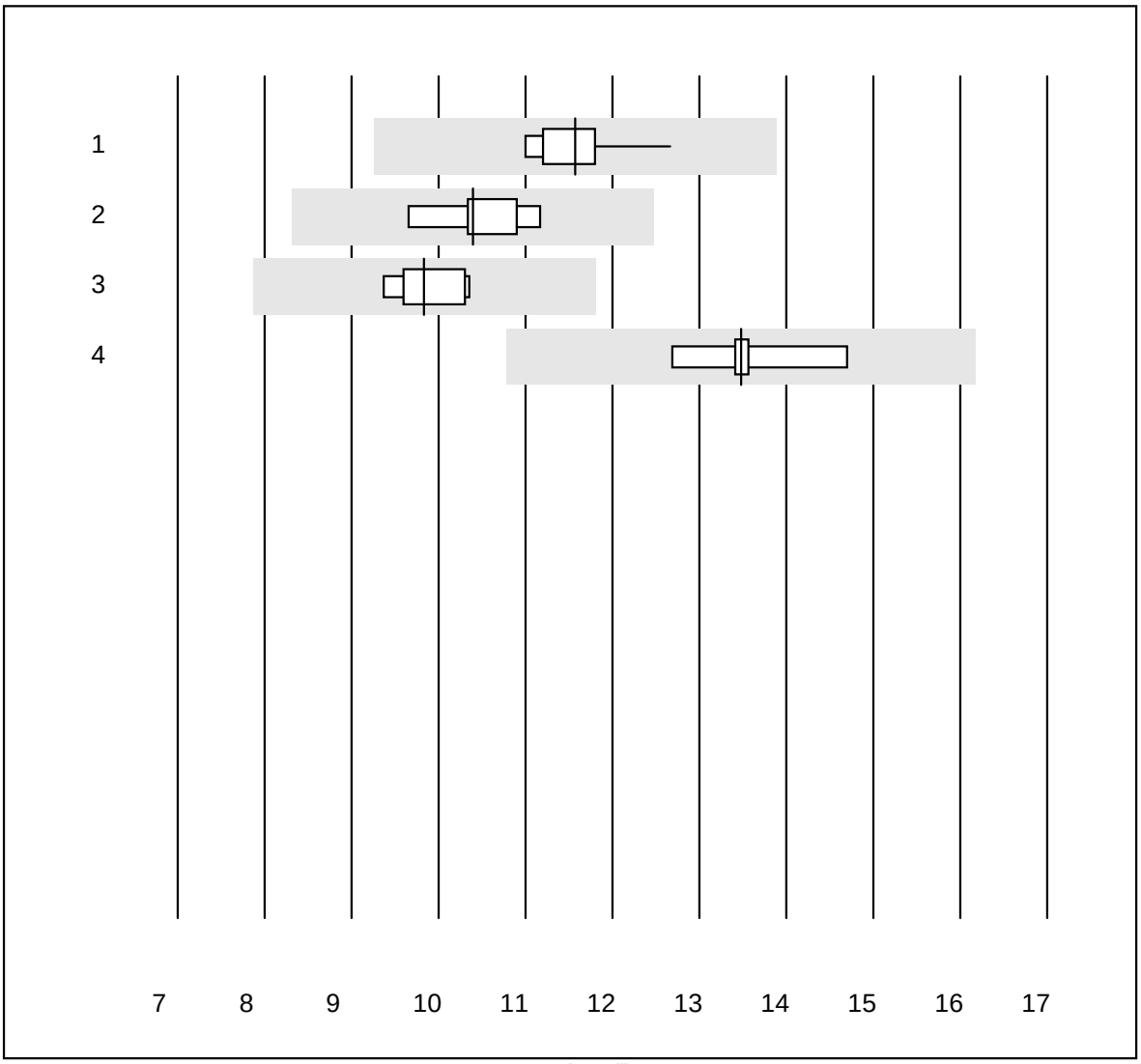


QUALAB tolerance : 21 %

D-Dimer NC (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	NycoCard	56	73.2	12.5	14.3	1.00	15.9	e

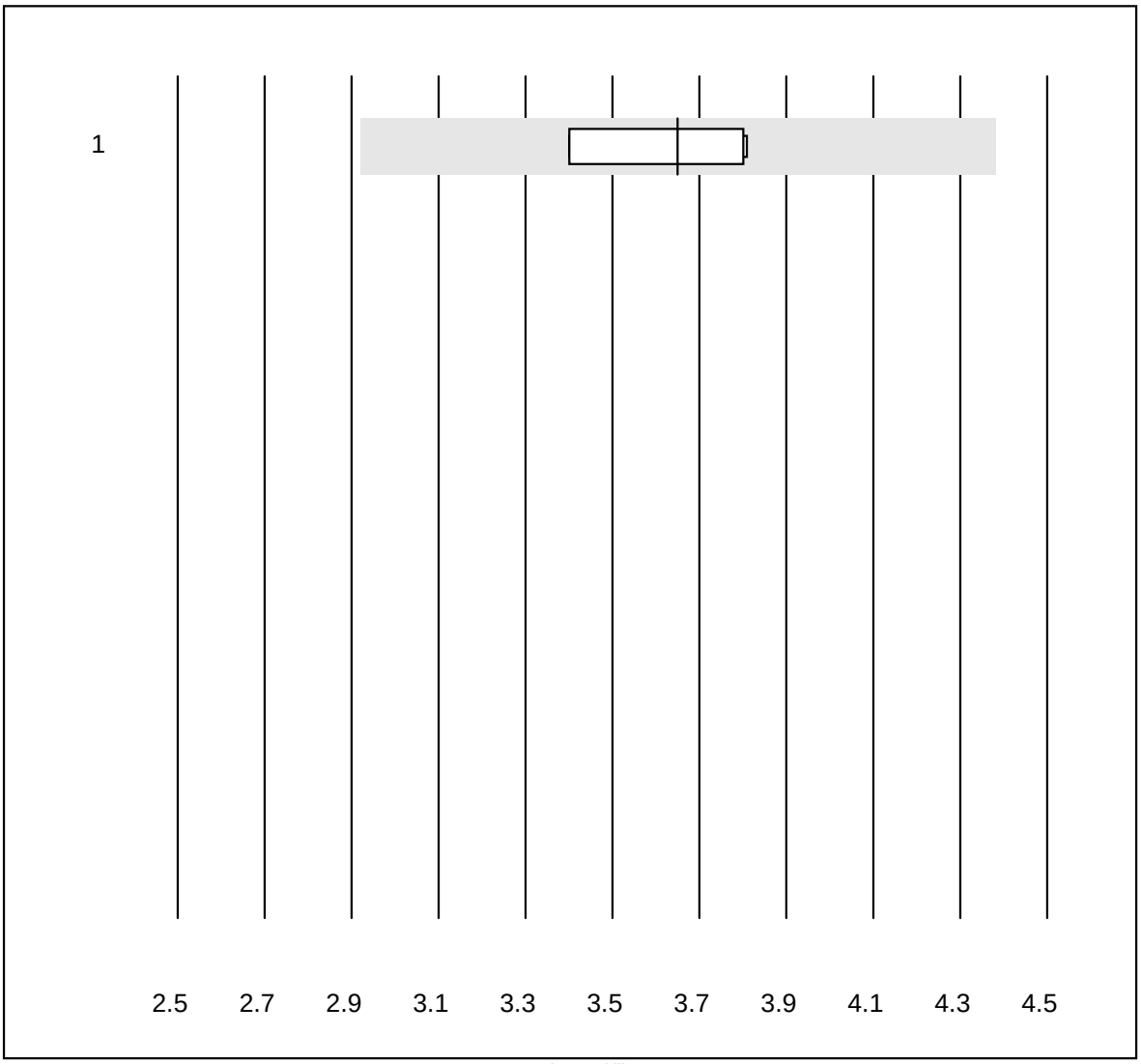
TSH



QUALAB tolerance : 20 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	10	100.0	0.0	0.0	11.6	4.1	e
2	ADVIA Centaur XP/CP	5	100.0	0.0	0.0	10.4	5.5	e*
3	Architect	7	100.0	0.0	0.0	9.8	3.6	e
4	Vidas	9	100.0	0.0	0.0	13.5	4.4	e

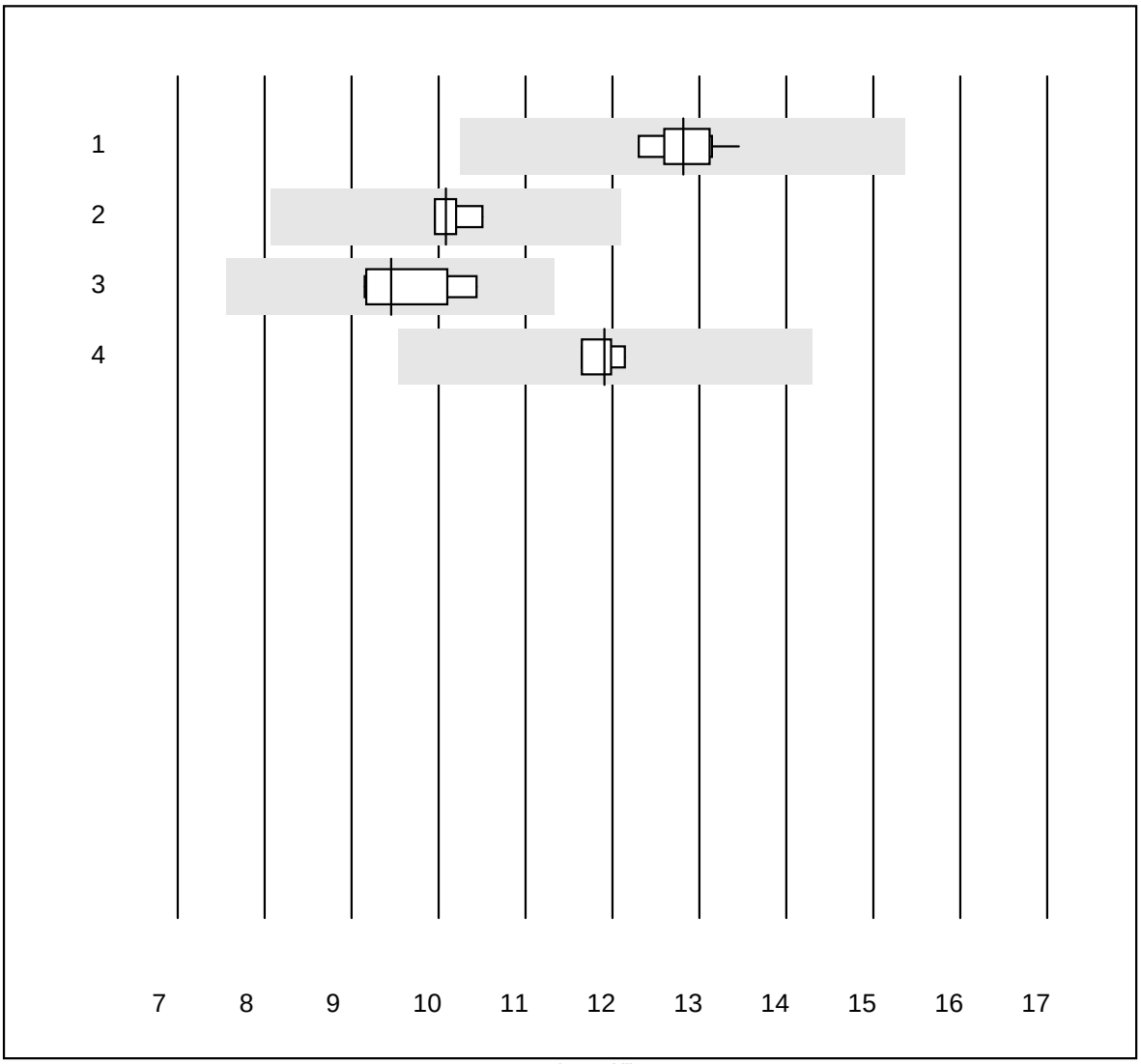
T3



QUALAB tolerance : 20 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	4	100.0	0.0	0.0	3.7	5.8	a

FT3

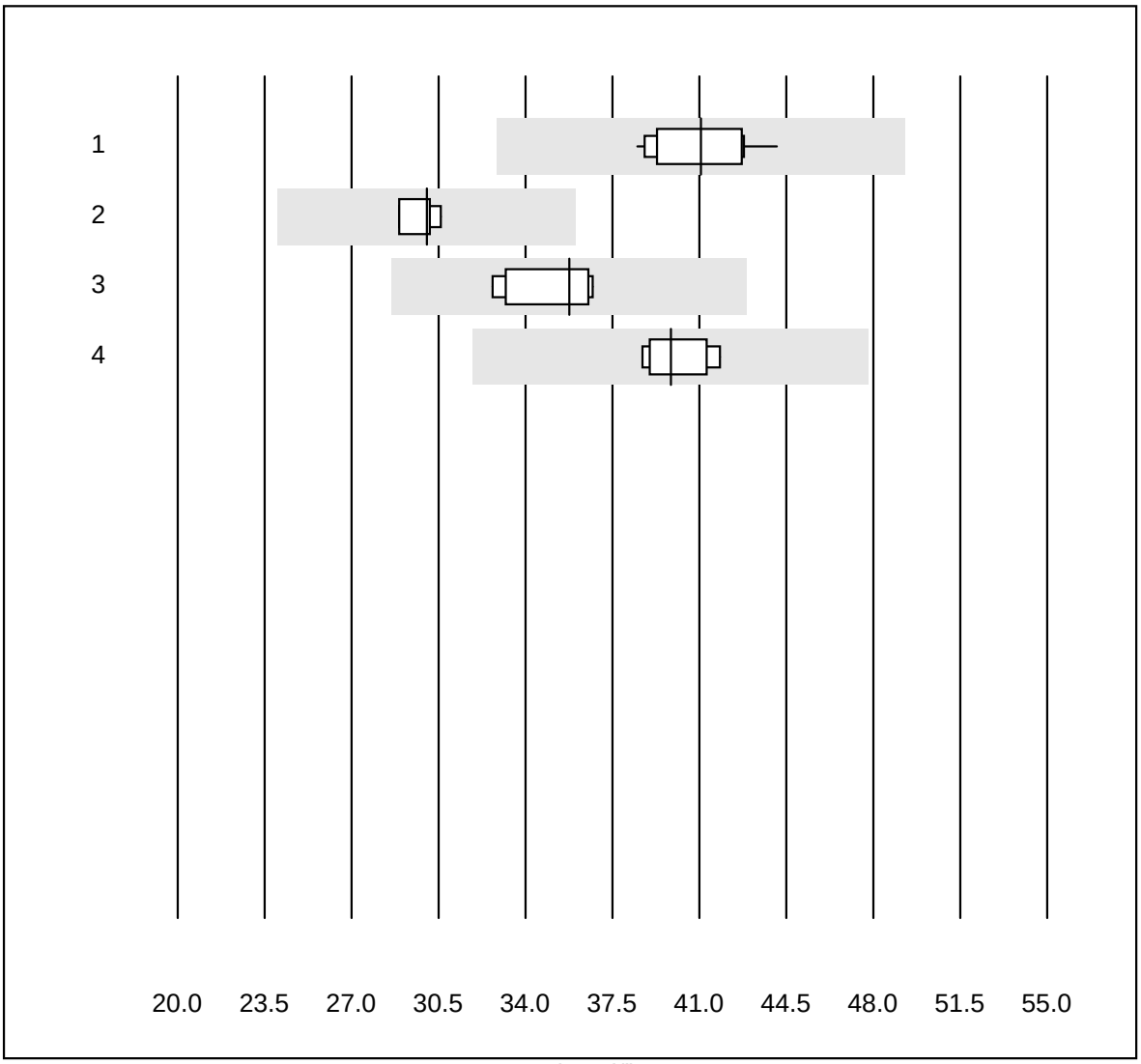


QUALAB tolerance : 20 %

FT3 (pmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	10	100.0	0.0	0.0	12.8	2.6	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	10.1	2.5	e
3	Architect	6	100.0	0.0	0.0	9.5	5.5	e
4	Vidas	4	100.0	0.0	0.0	11.9	1.7	e

FT4

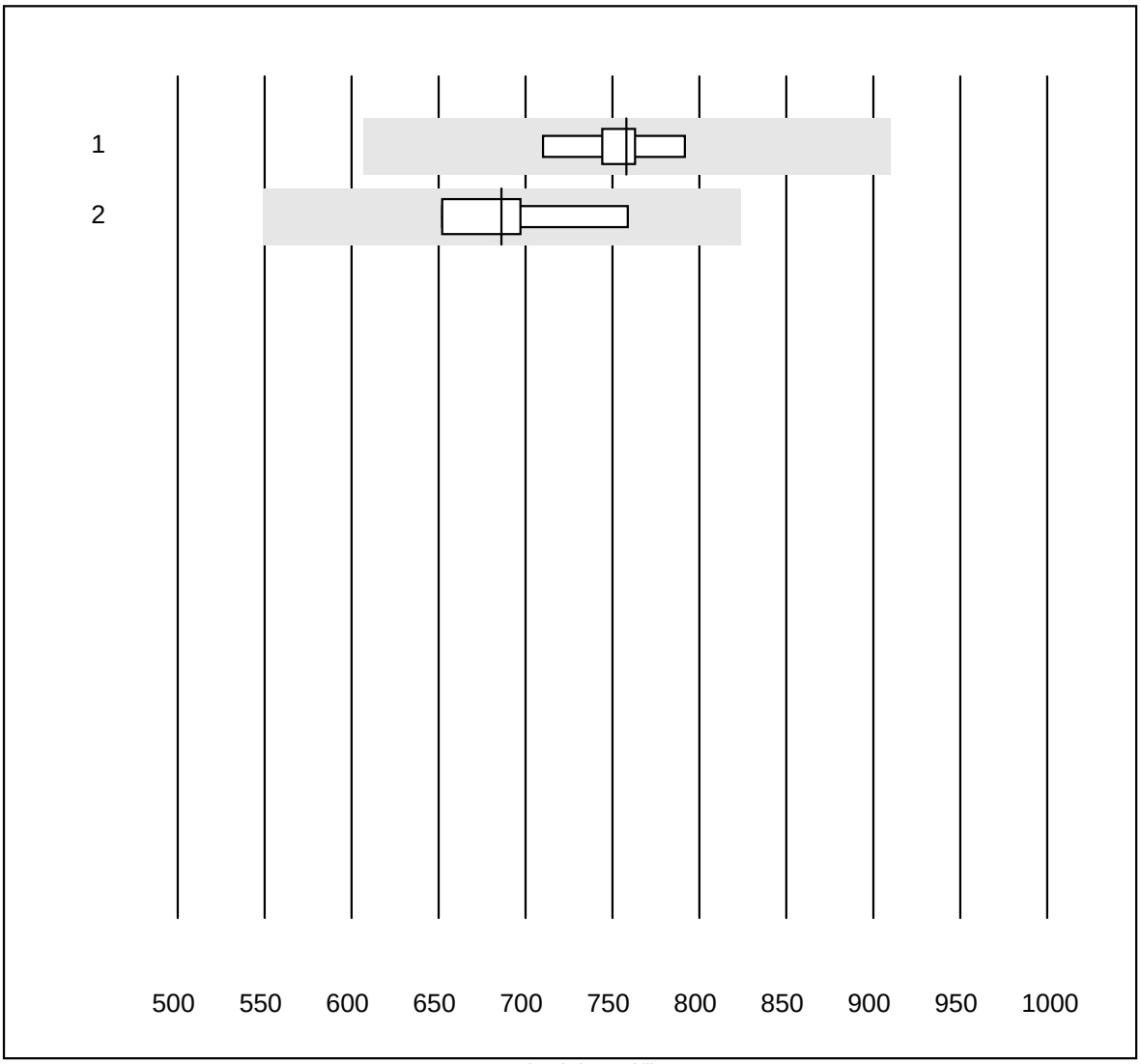


QUALAB tolerance : 20 %

FT4 (pmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	11	100.0	0.0	0.0	41.1	4.2	e
2	ADVIA Centaur XP	4	100.0	0.0	0.0	30.0	2.4	e
3	Architect	6	100.0	0.0	0.0	35.8	5.0	e
4	Vidas	6	100.0	0.0	0.0	39.8	3.1	e

Cortisol

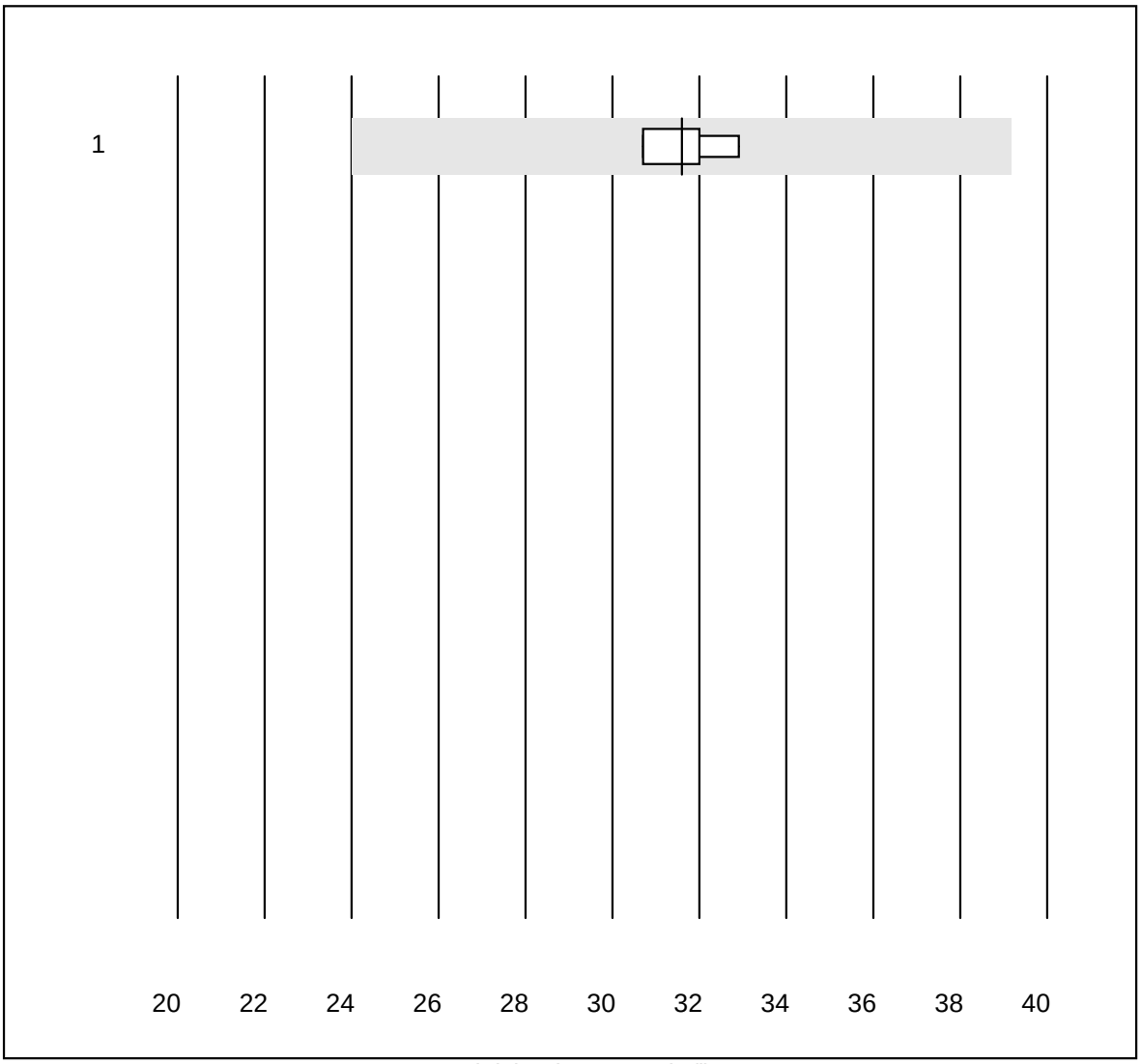


QUALAB tolerance : 20 %

Cortisol (nmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	6	100.0	0.0	0.0	758	3.5	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	686	6.6	e*

Luteinizing hormone

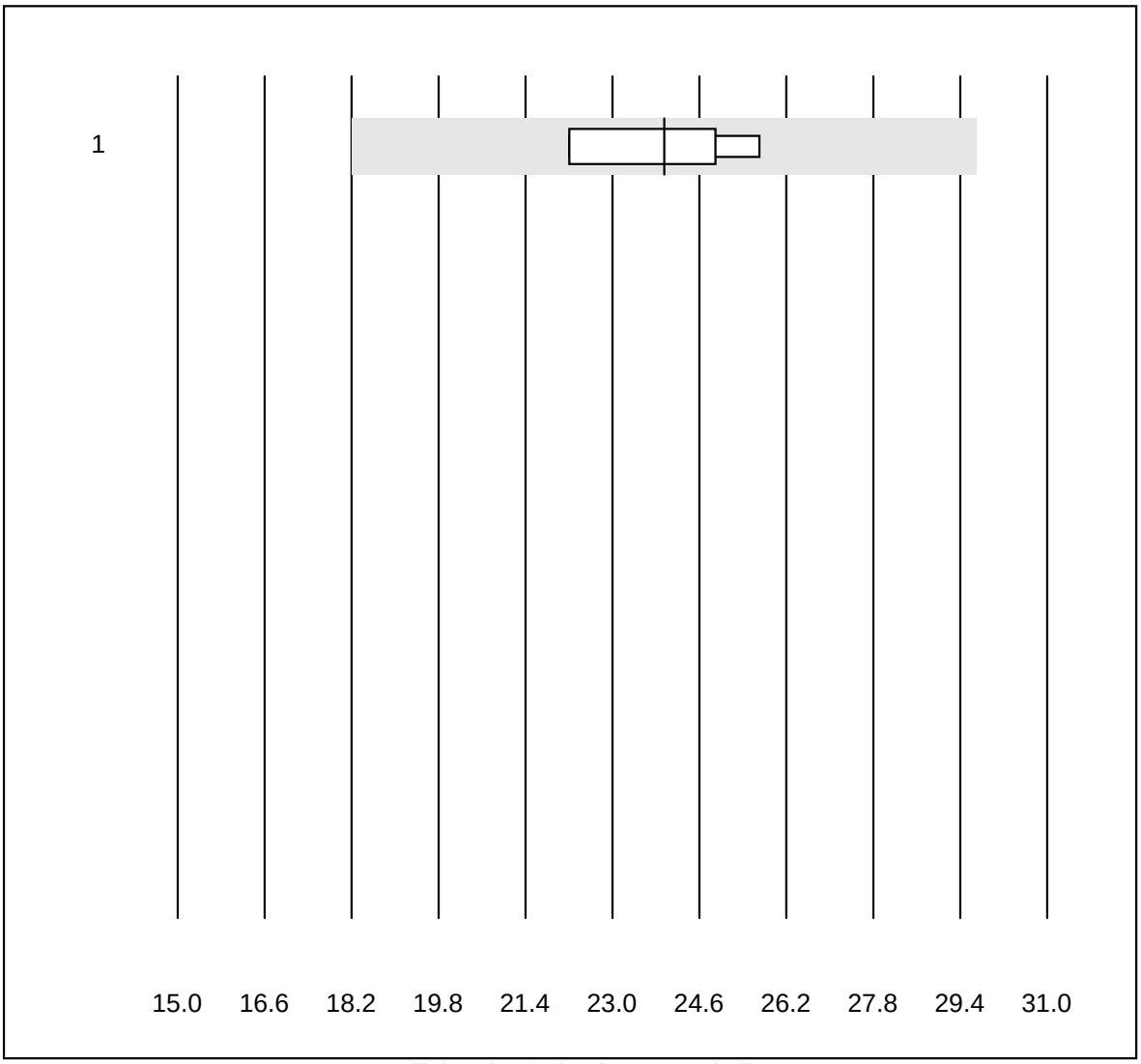


QUALAB tolerance : 24 %

Luteinizing hormone (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	31.6	3.0	e

Follicle-stimulating hormone

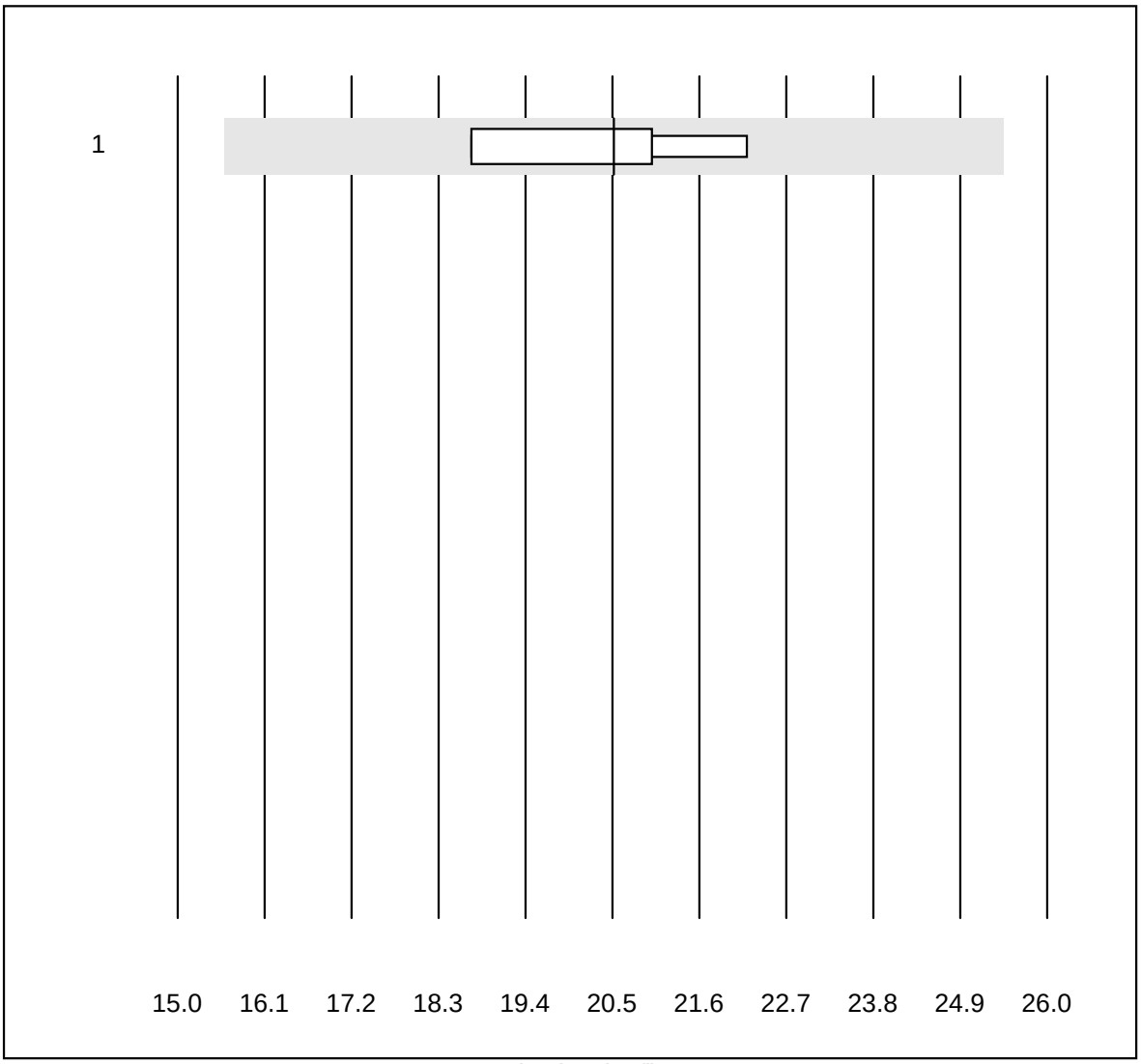


QUALAB tolerance : 24 %

Follicle-stimulating hormone (U/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	24.0	6.8	e*

Prolactine

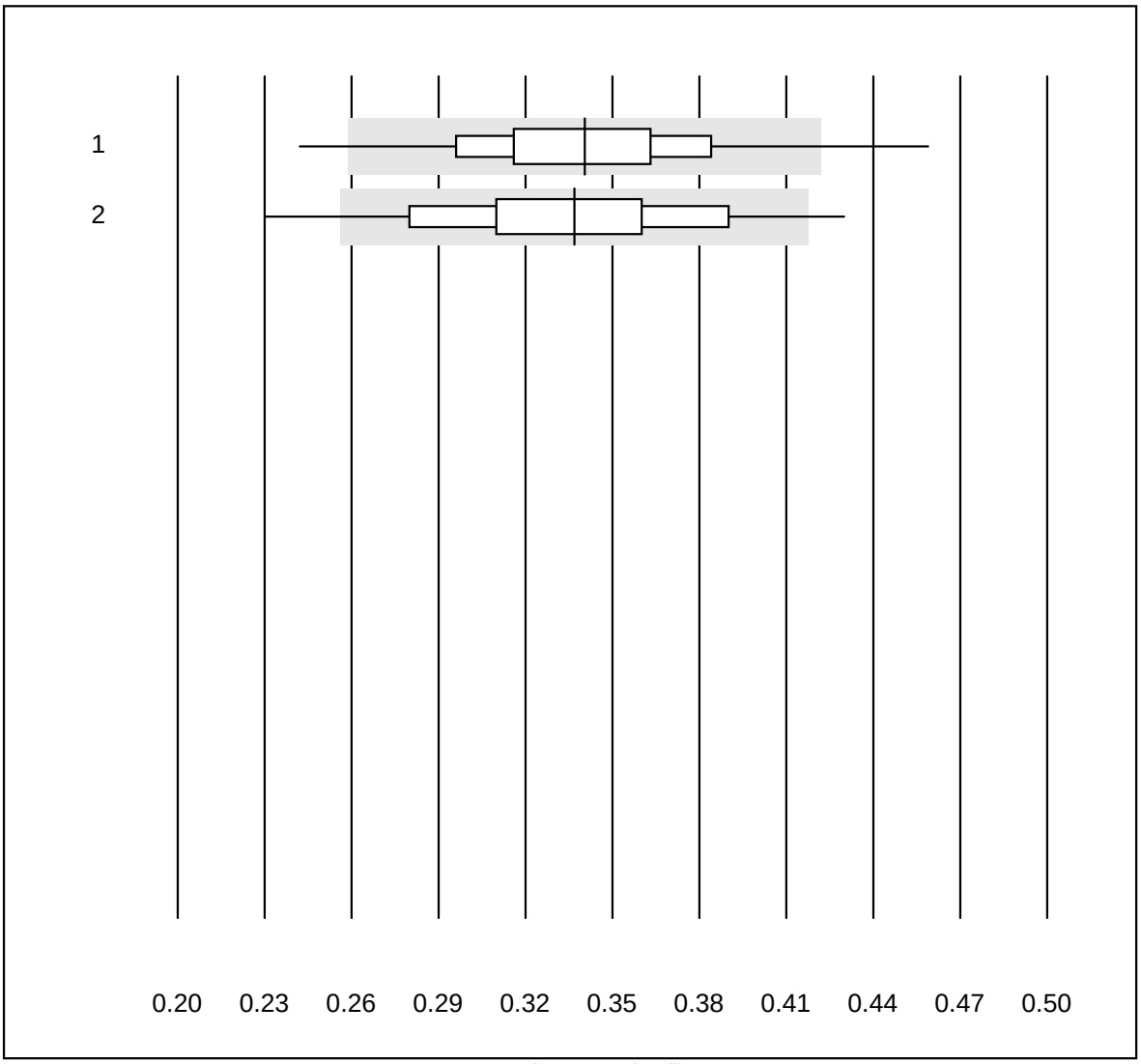


QUALAB tolerance : 24 %

Prolactine (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	20.5	7.2	e*

Troponin T CR

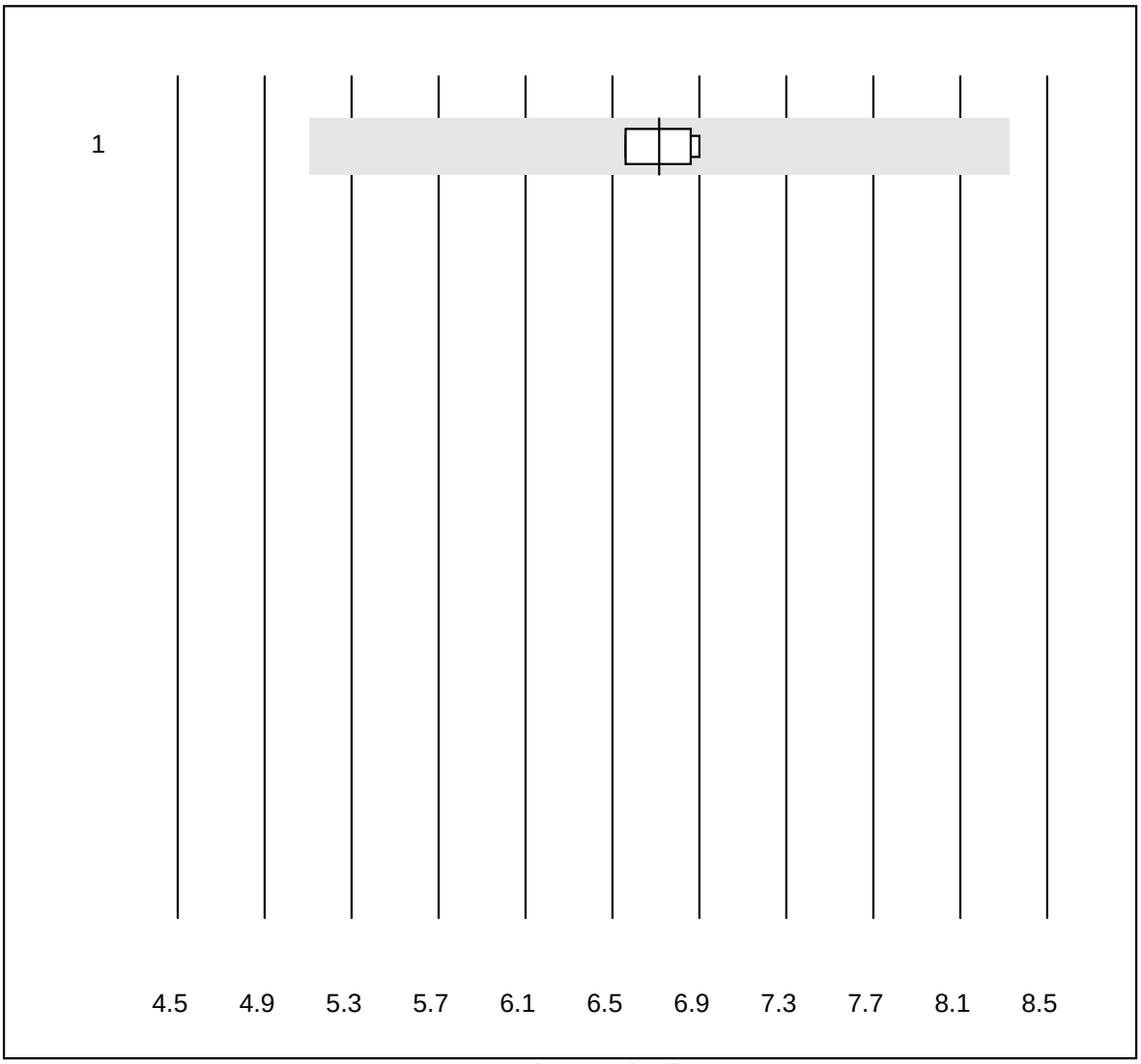


QUALAB tolerance : 24 %

Troponin T CR (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas h 232	679	96.7	2.1	1.2	0.34	10.2	e
2	Cardiac Reader	73	87.6	11.0	1.4	0.34	13.1	e

Troponin I WB

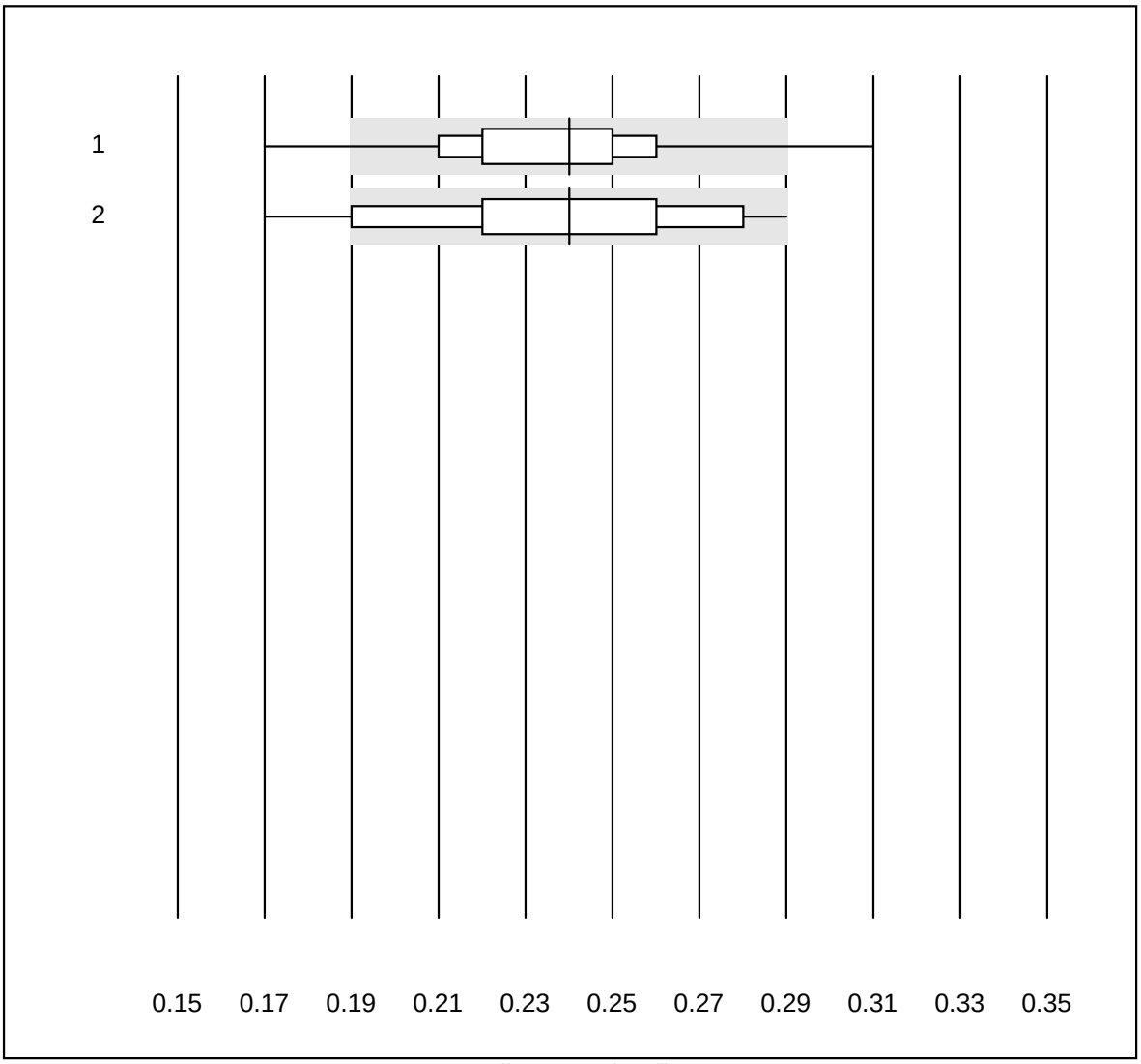


QUALAB tolerance : 24 %

Troponin I WB (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	iStat	4	100.0	0.0	0.0	6.72	2.7	e

D-dimer CR

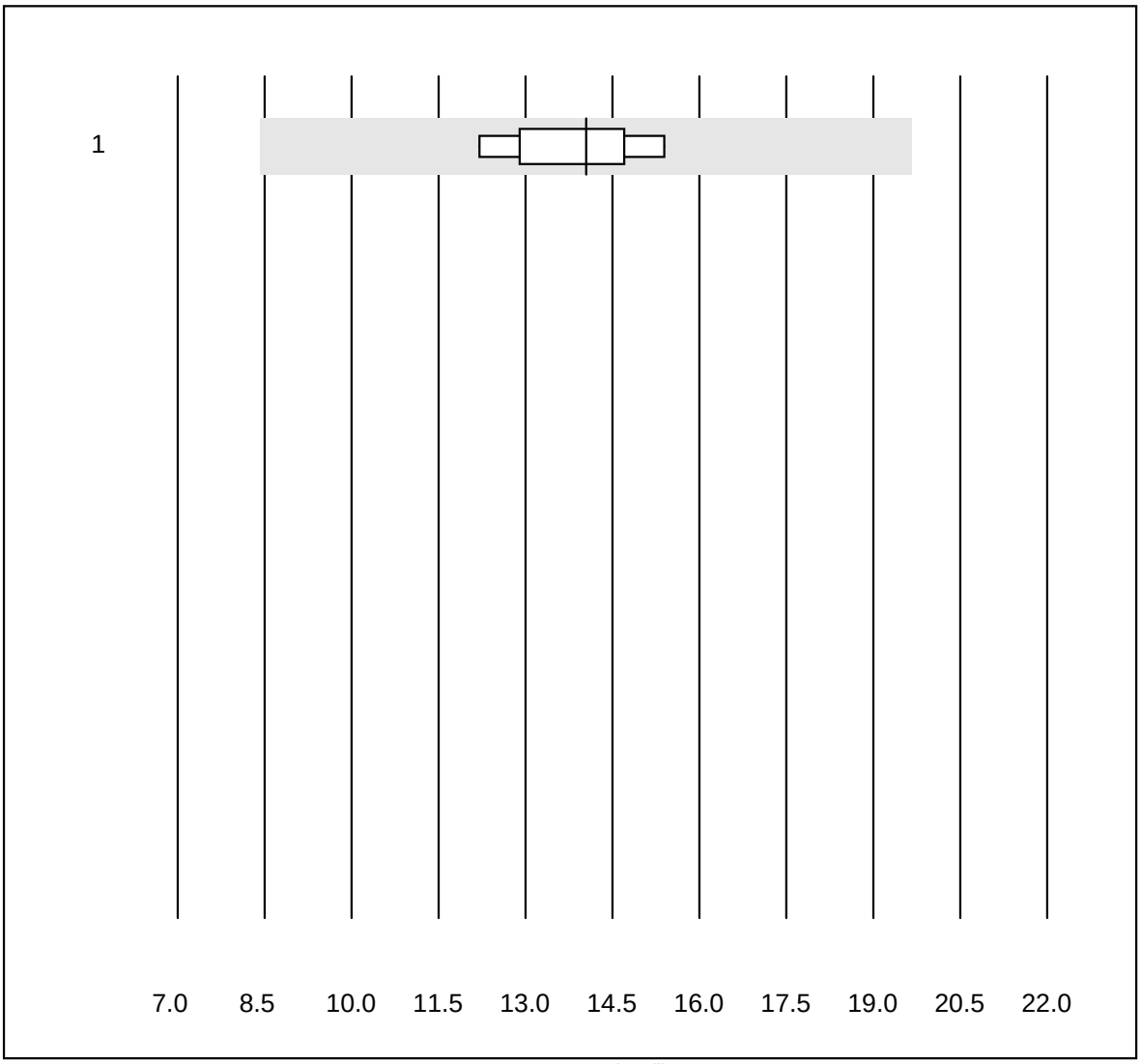


QUALAB tolerance : 21 %

D-dimer CR (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas h 232	692	95.9	2.5	1.6	0.24	9.7	e
2	Cardiac Reader	70	94.2	2.9	2.9	0.24	12.6	e

CKMB - K8

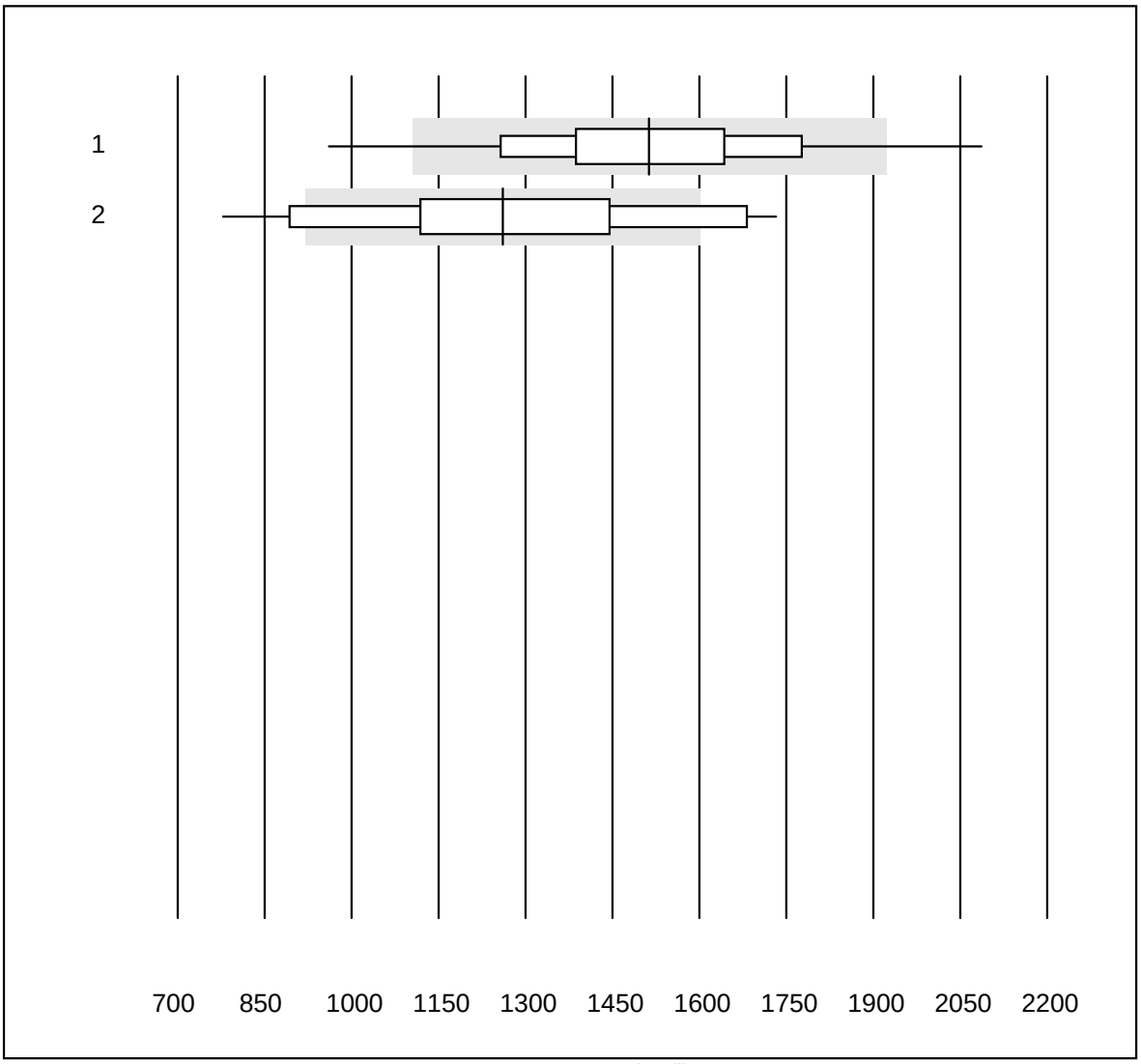


QUALAB tolerance : 40 %

CKMB - K8 (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas h 232	6	100.0	0.0	0.0	14.1	8.8	e

NT-proBNP CR

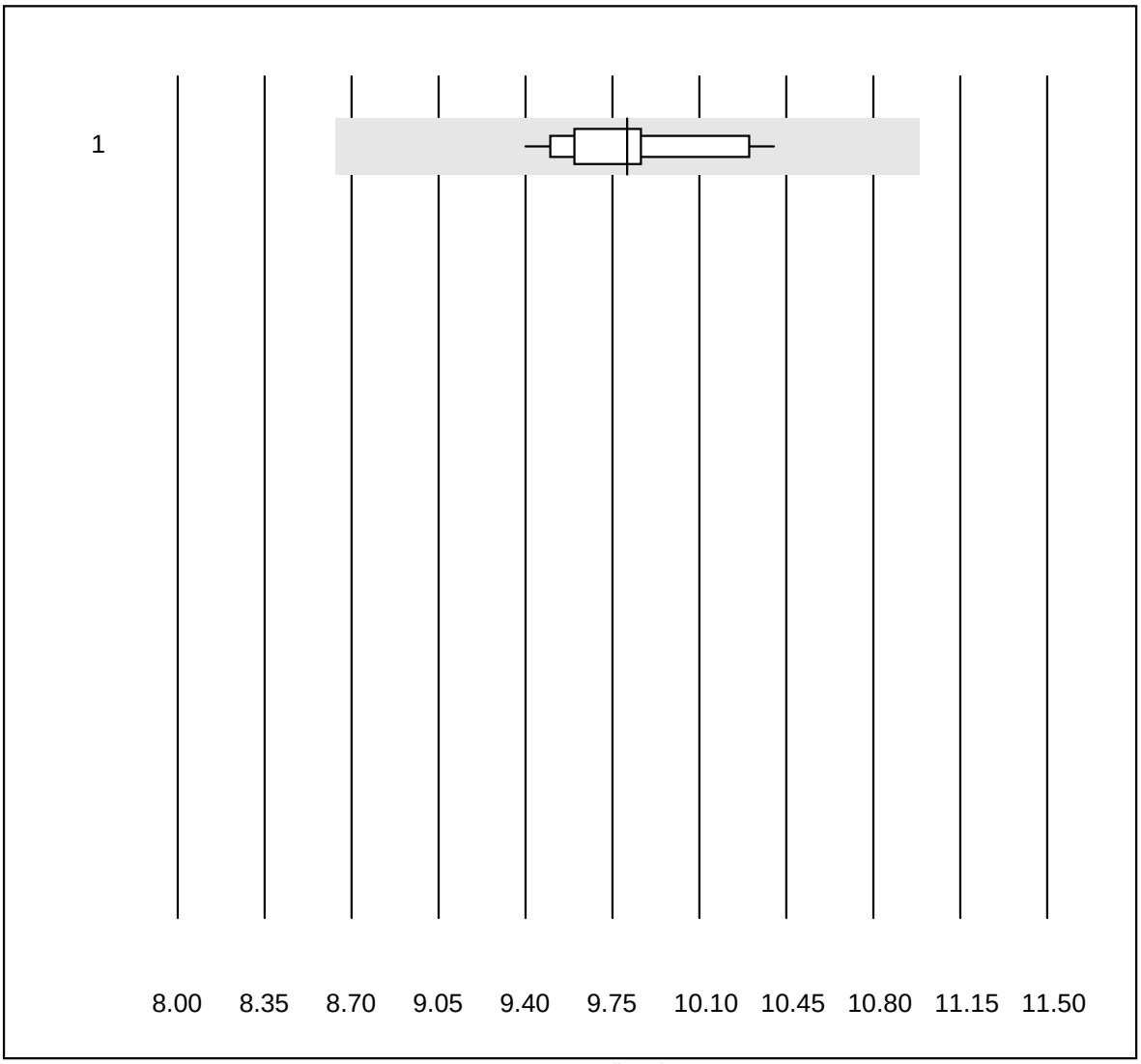


QUALAB tolerance : 27 %

NT-proBNP CR (ng/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas h 232	433	94.2	4.6	1.2	1514	13.4	e
2	Cardiac Reader	26	73.1	23.1	3.8	1260	20.8	e*

PCO2 CCA

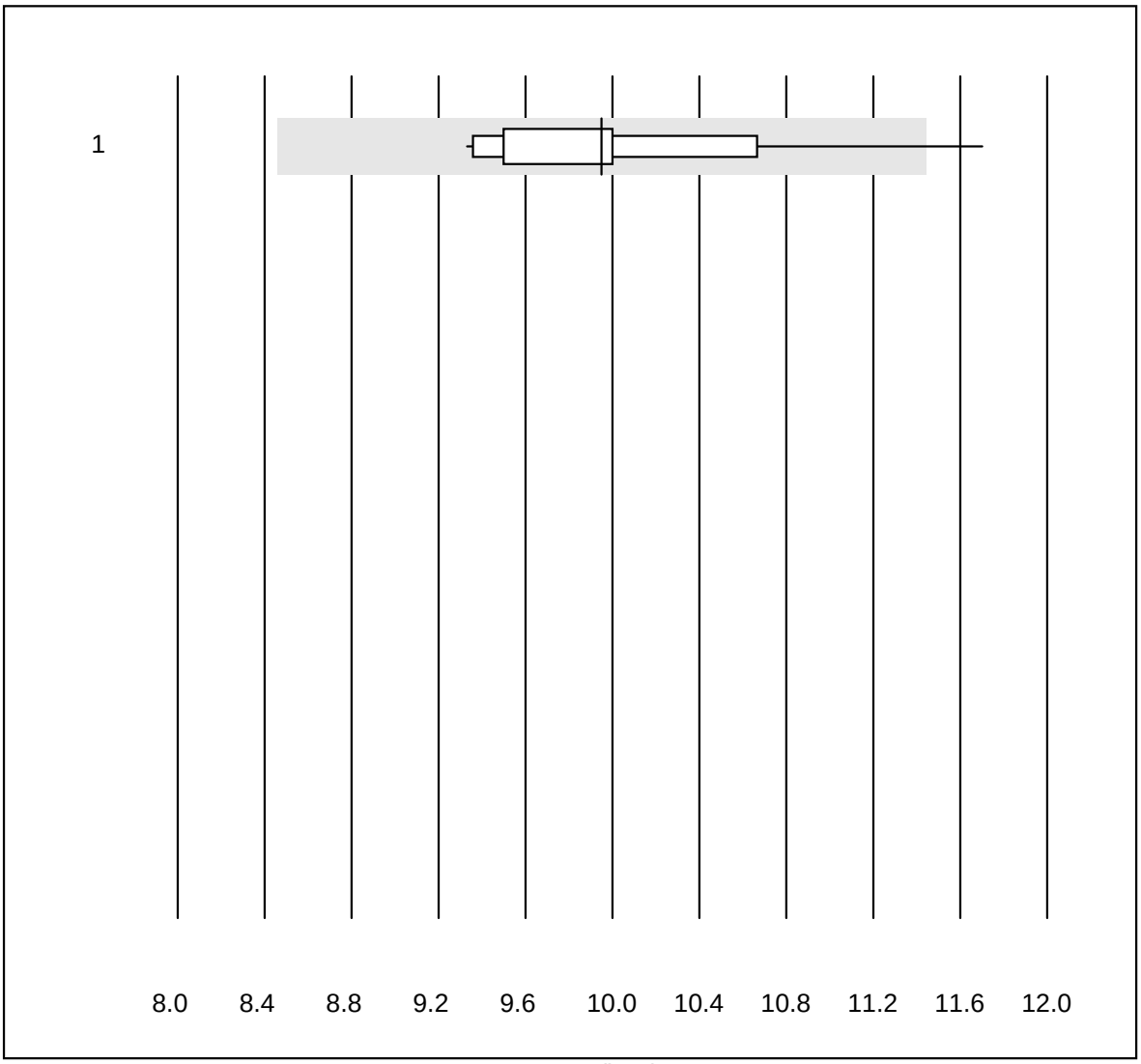


QUALAB tolerance : 12 %

PCO2 CCA (kPa)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	OPTI CCA	12	100.0	0.0	0.0	9.81	3.1	e

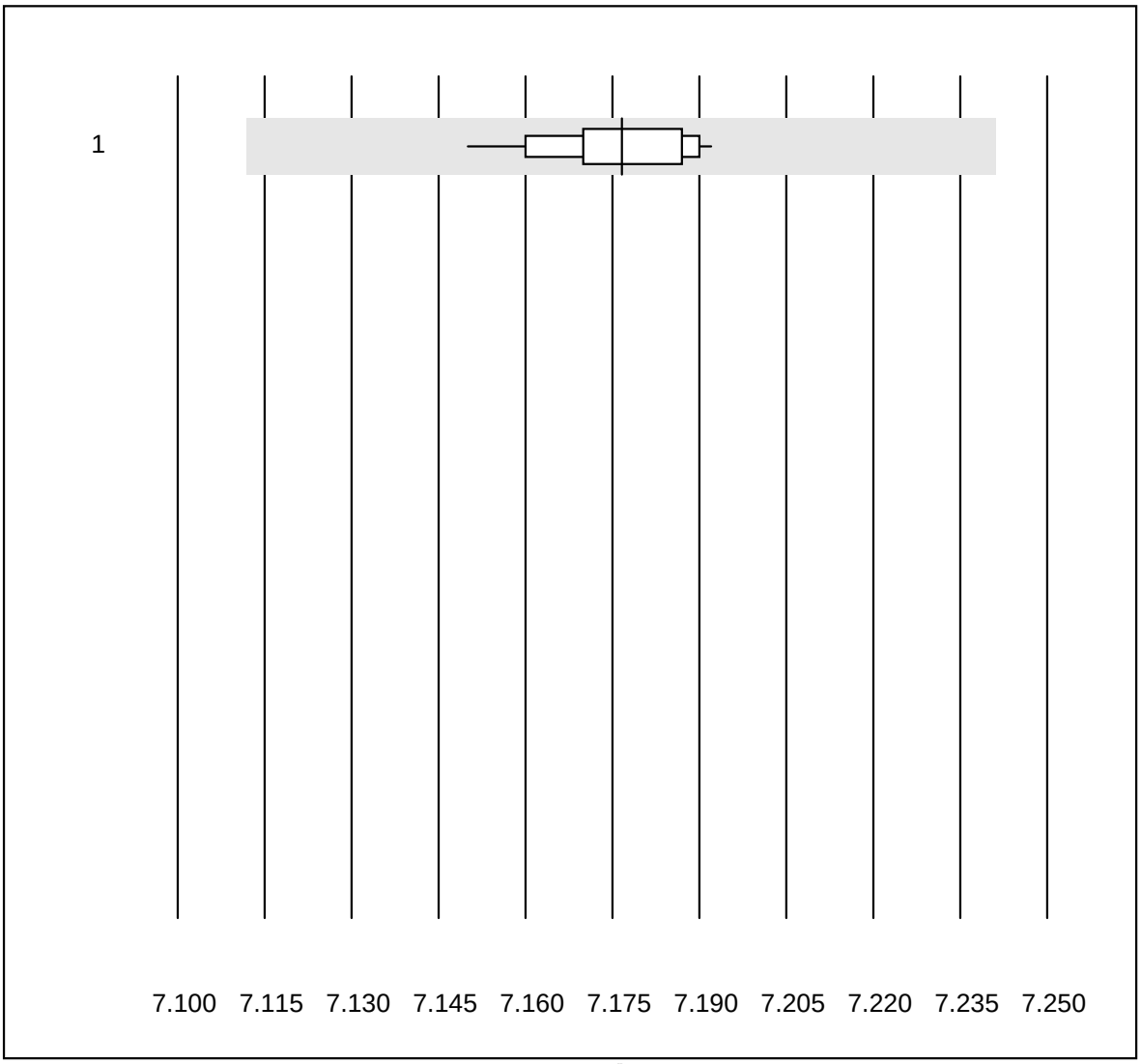
PO2 CCA



QUALAB tolerance : 15 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	OPTI CCA	12	91.7	8.3	0.0	9.95	6.6	e*

pH CCA

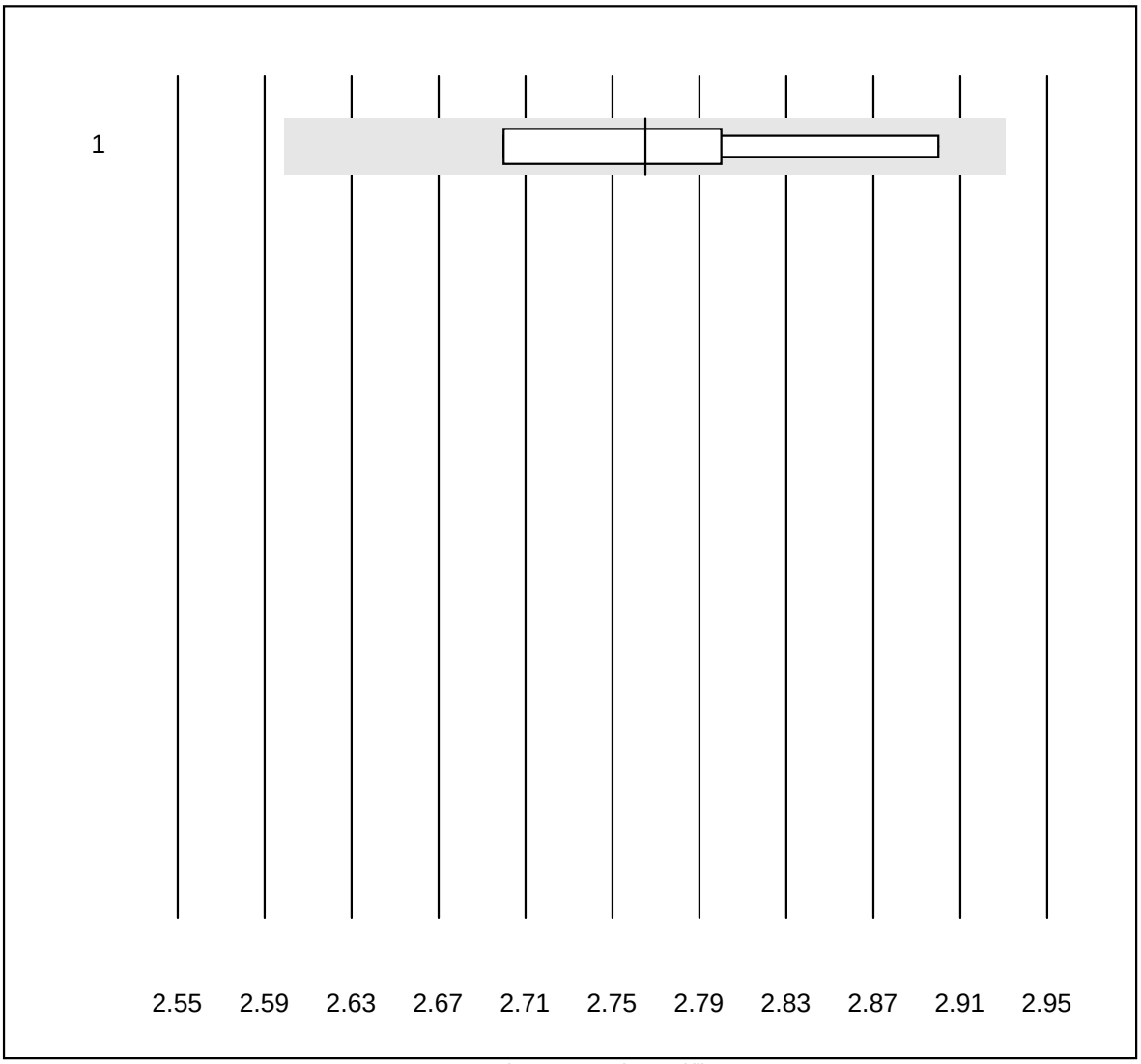


QUALAB tolerance : 1 %

pH CCA ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	OPTI CCA	12	100.0	0.0	0.0	7.18	0.2	e

Potassium CCA

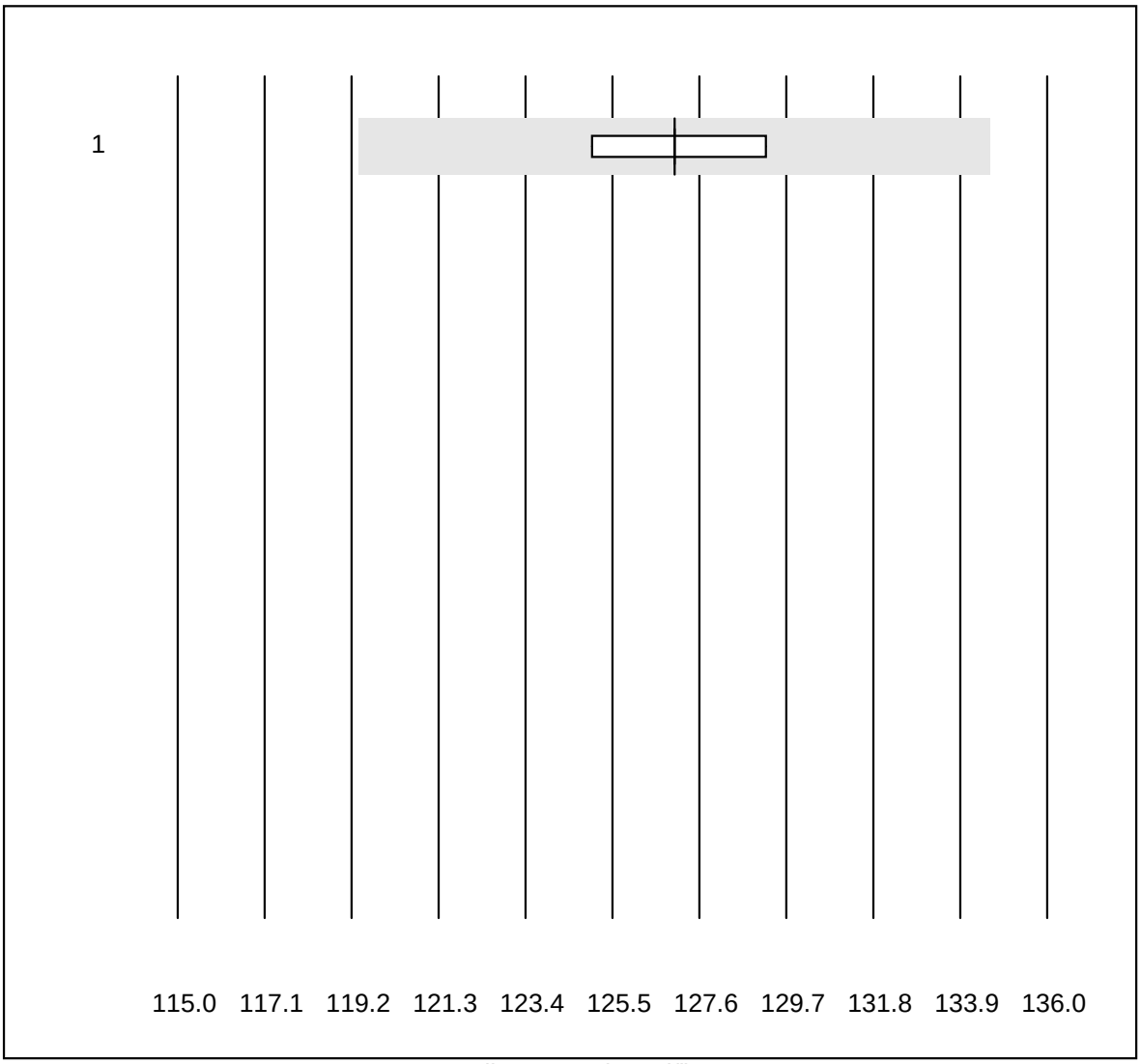


QUALAB tolerance : 6 %

Potassium CCA (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	OPTI CCA	6	100.0	0.0	0.0	2.8	2.8	e*

Sodium CCA

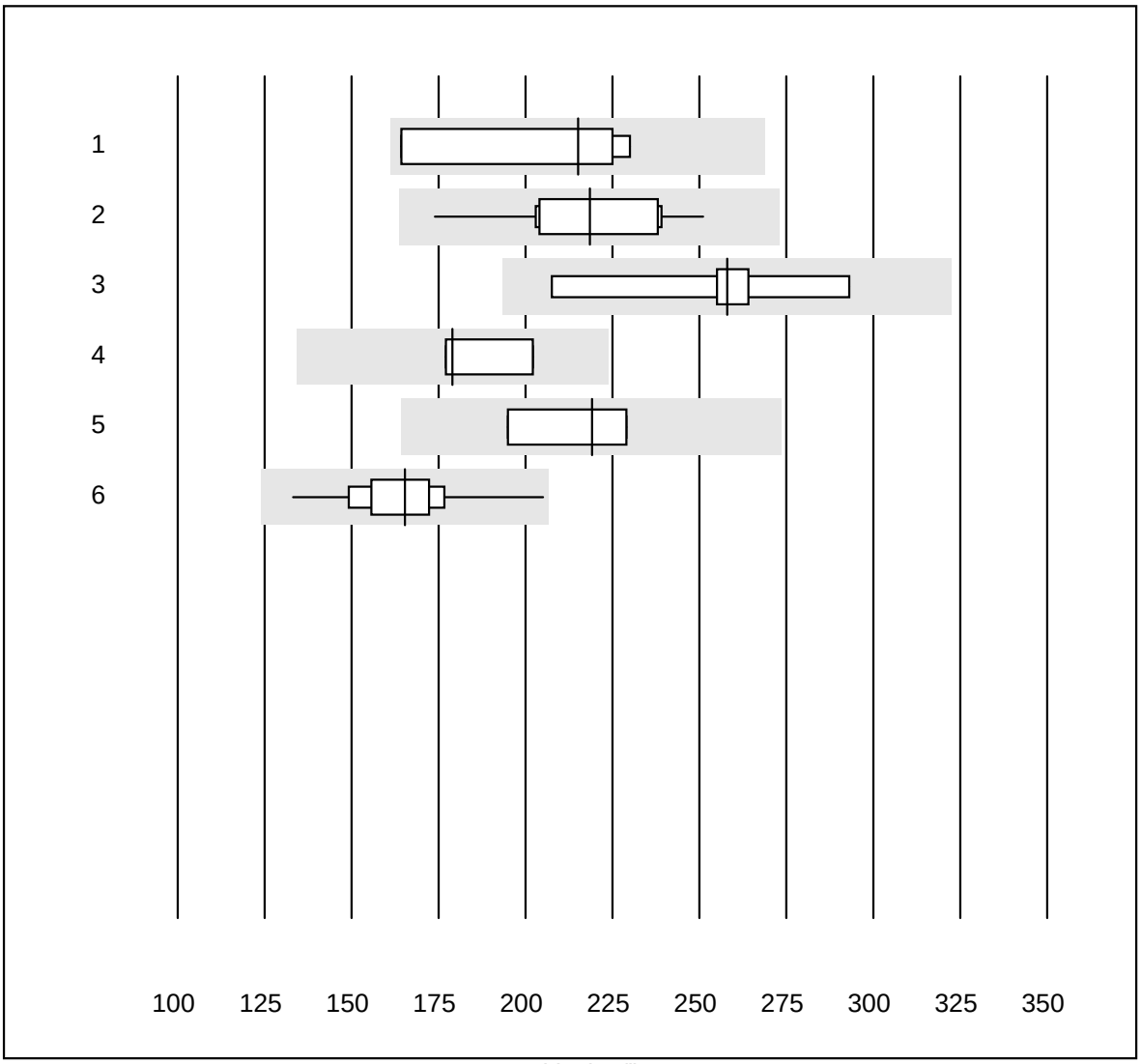


QUALAB tolerance : 6 %

Sodium CCA (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	OPTI CCA	5	100.0	0.0	0.0	127.0	1.2	e

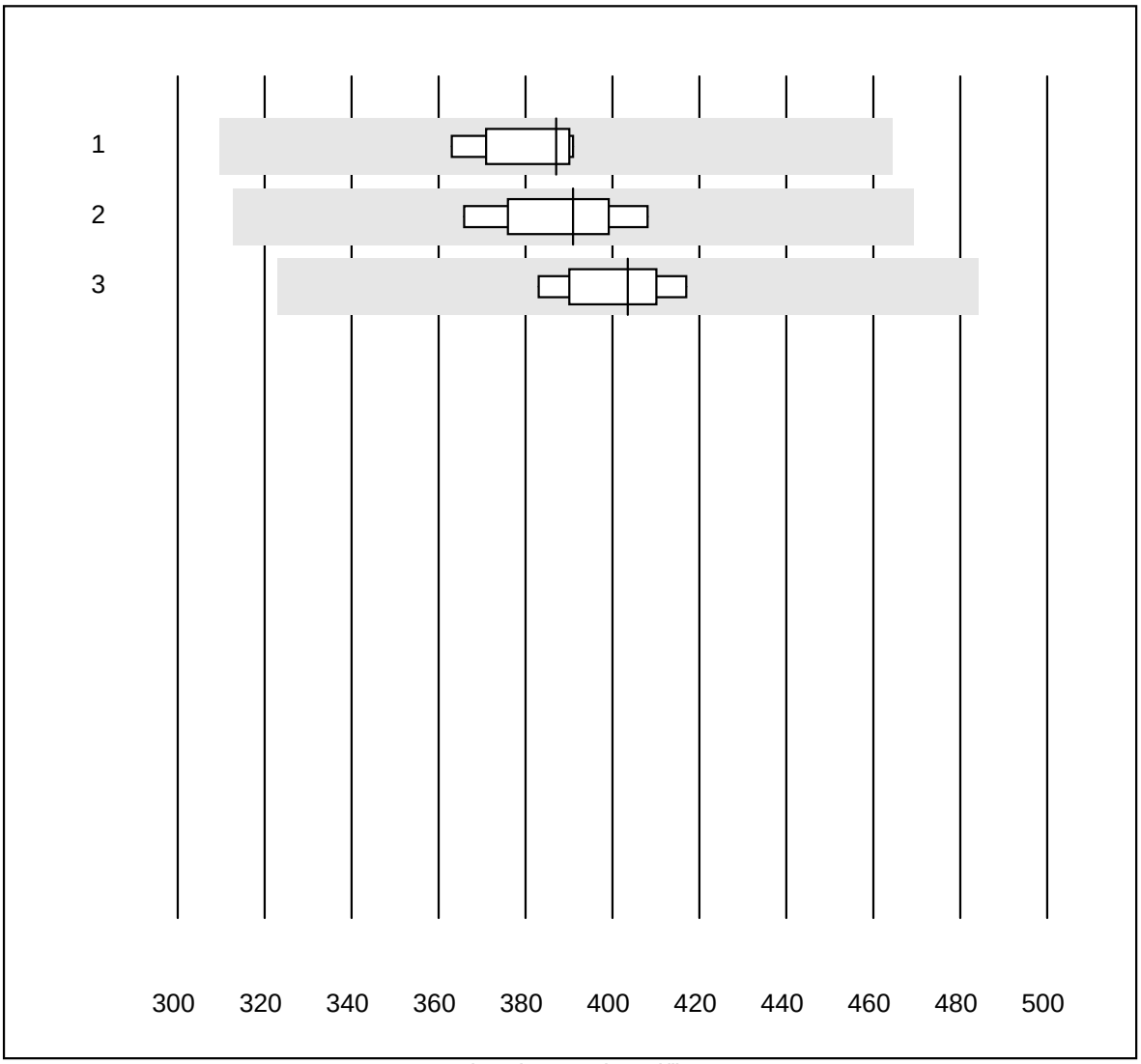
Ferritin



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	4	100.0	0.0	0.0	215.15	14.5	e*
2	Cobas E / Elecsys	11	100.0	0.0	0.0	218.43	9.7	e
3	Architect	5	100.0	0.0	0.0	258.00	12.0	e*
4	Mira/DiaSys	5	60.0	0.0	40.0	179.00	7.5	e*
5	Mini Vidas	4	75.0	0.0	25.0	219.05	8.1	e*
6	Eurolyser	24	95.8	0.0	4.2	165.29	9.5	e

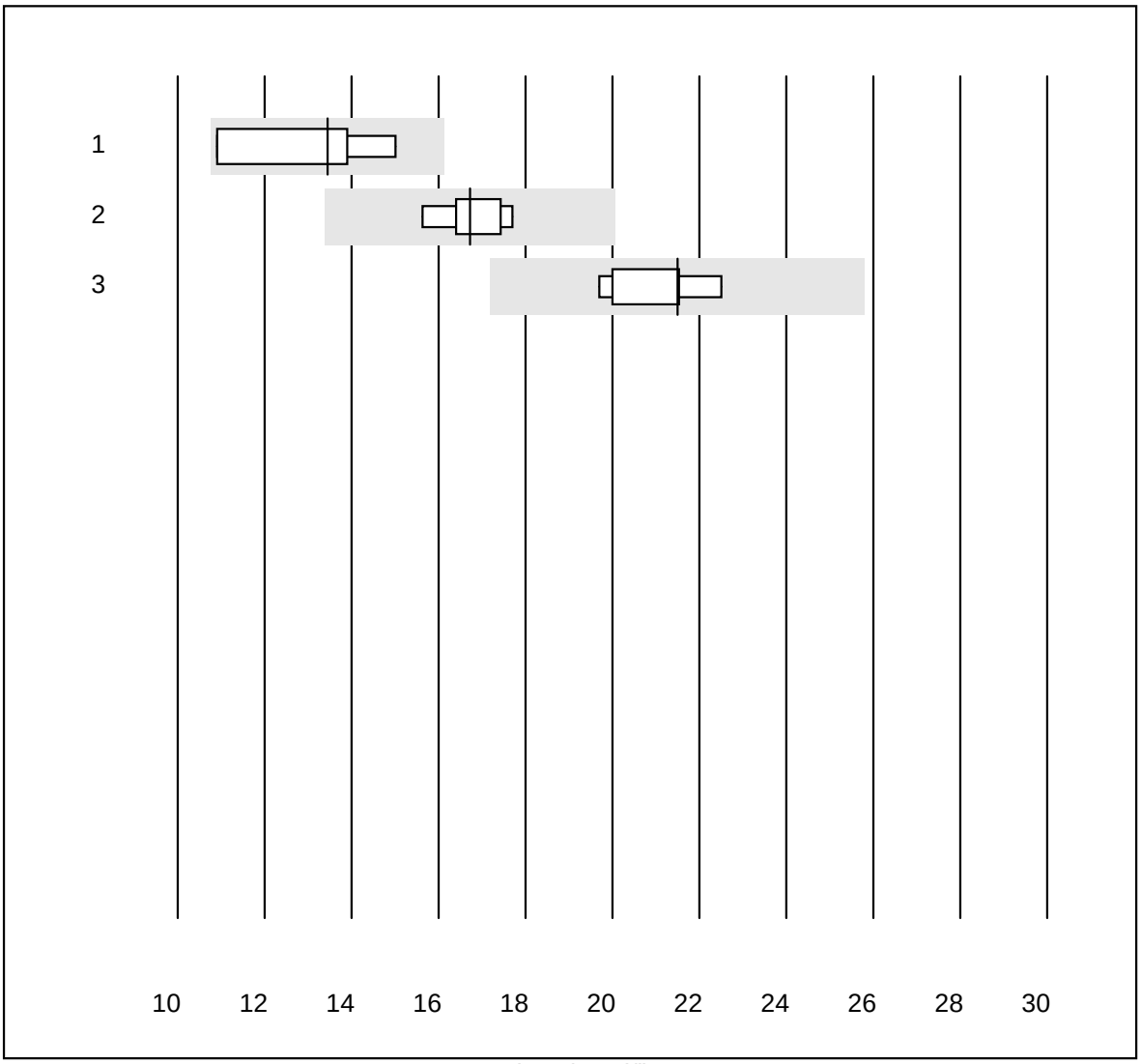
Vitamin B12



QUALAB tolerance : 20 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	5	100.0	0.0	0.0	387.00	3.3	e
2	Cobas E / Elecsys	7	100.0	0.0	0.0	391.00	3.8	e
3	Architect	5	100.0	0.0	0.0	403.52	3.5	e

Folate

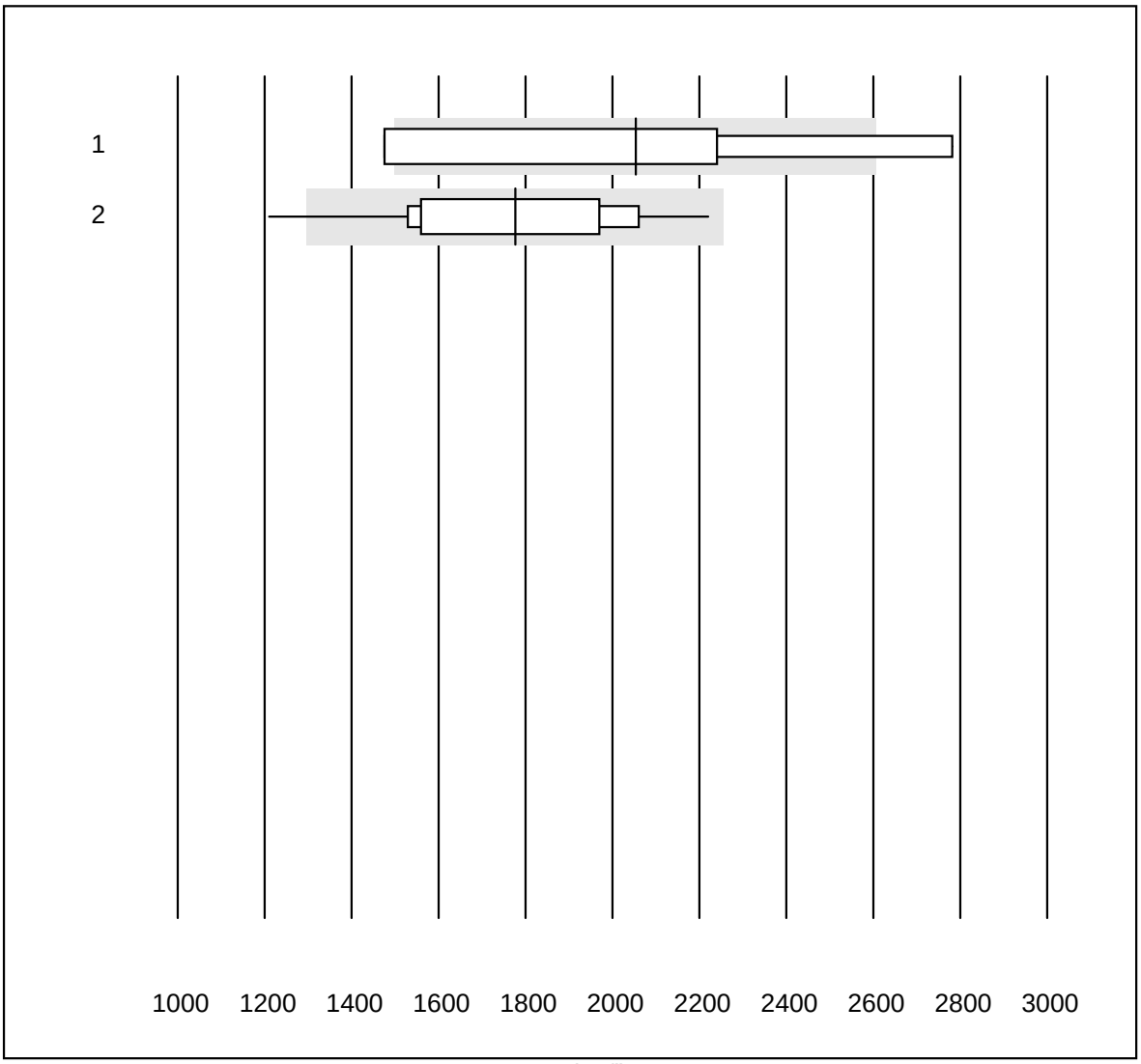


QUALAB tolerance : 20 %

Folate (nmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP	4	100.0	0.0	0.0	13.45	13.2	e*
2	Cobas E / Elecsys	7	100.0	0.0	0.0	16.72	4.1	e
3	Architect	5	100.0	0.0	0.0	21.50	5.6	e*

BNP

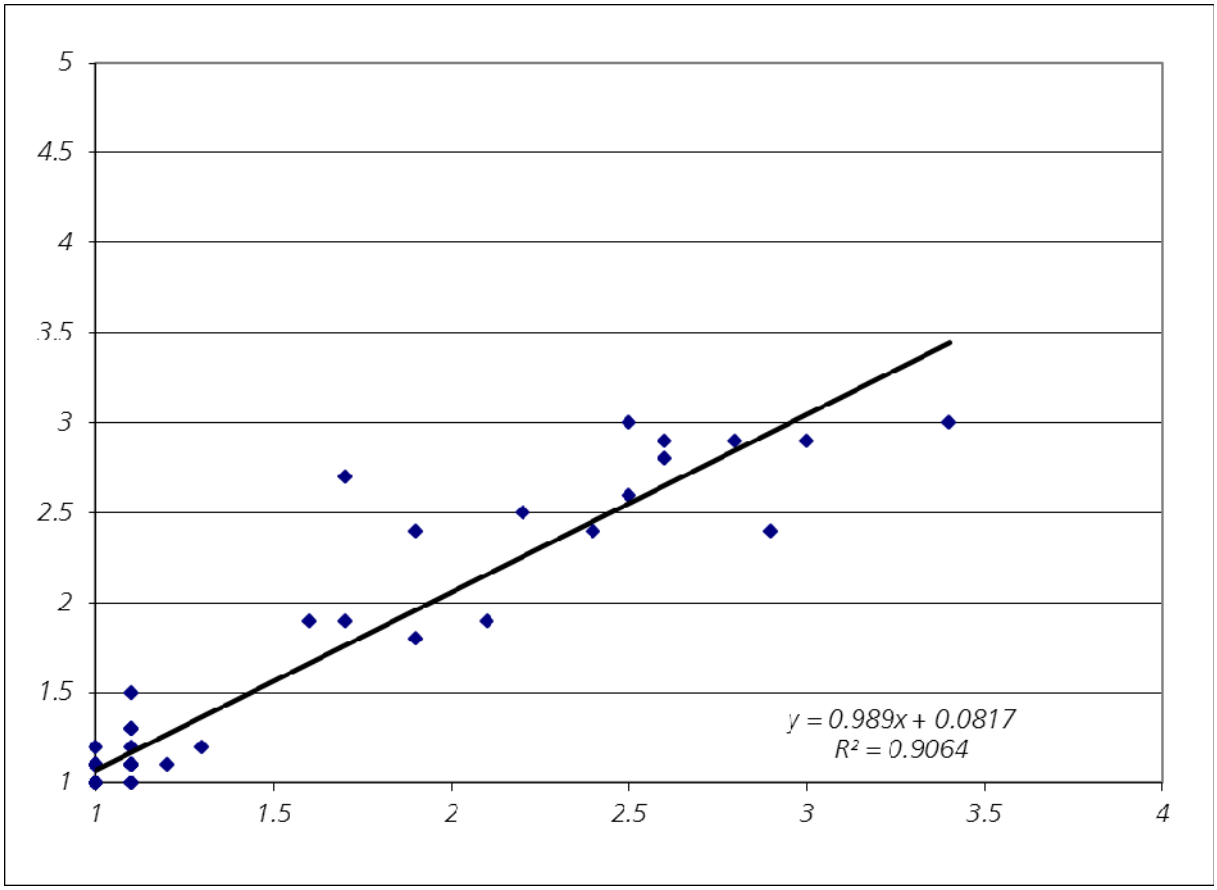


QUALAB tolerance : 27 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Heart Check	4	50.0	50.0	0.0	2053.0	26.6	e*
2	Triage Meter	37	78.4	5.4	16.2	1775.8	14.0	e

INR INRatio

University Hospital Zuerich

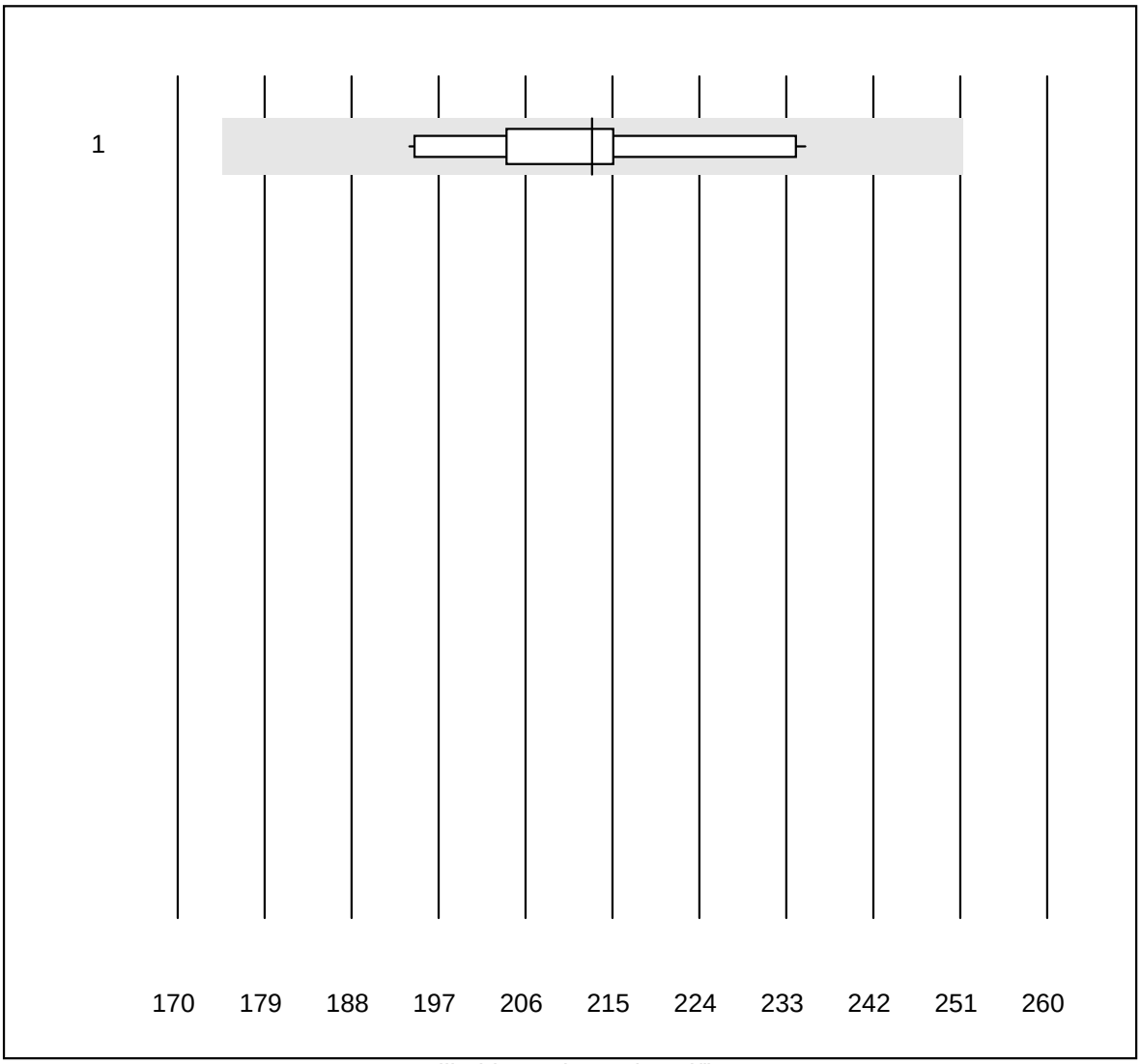


INRatio Participants

G10 is a split-sample survey. We compare INR-values from our participans with the corresponding plasma INR from University Hospital Zuerich.

Nr.	Device	Total	% good	% insufficient	% outlier
1	INRatio	66	84.85	12.12	3.03

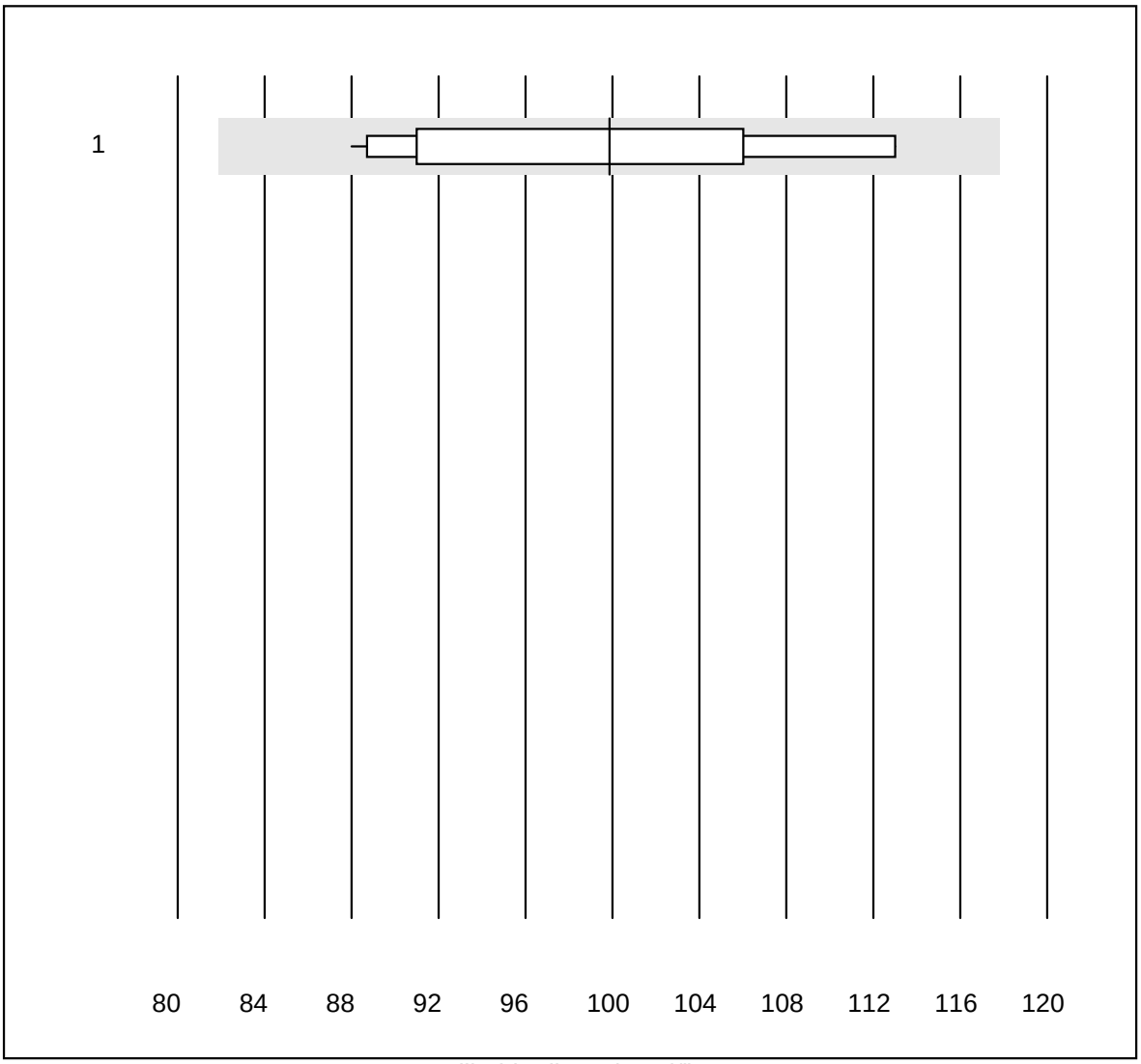
Bilirubin total Neo



QUALAB tolerance : 18 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	12	100.0	0.0	0.0	213	6.4	e

Bilirubin direct

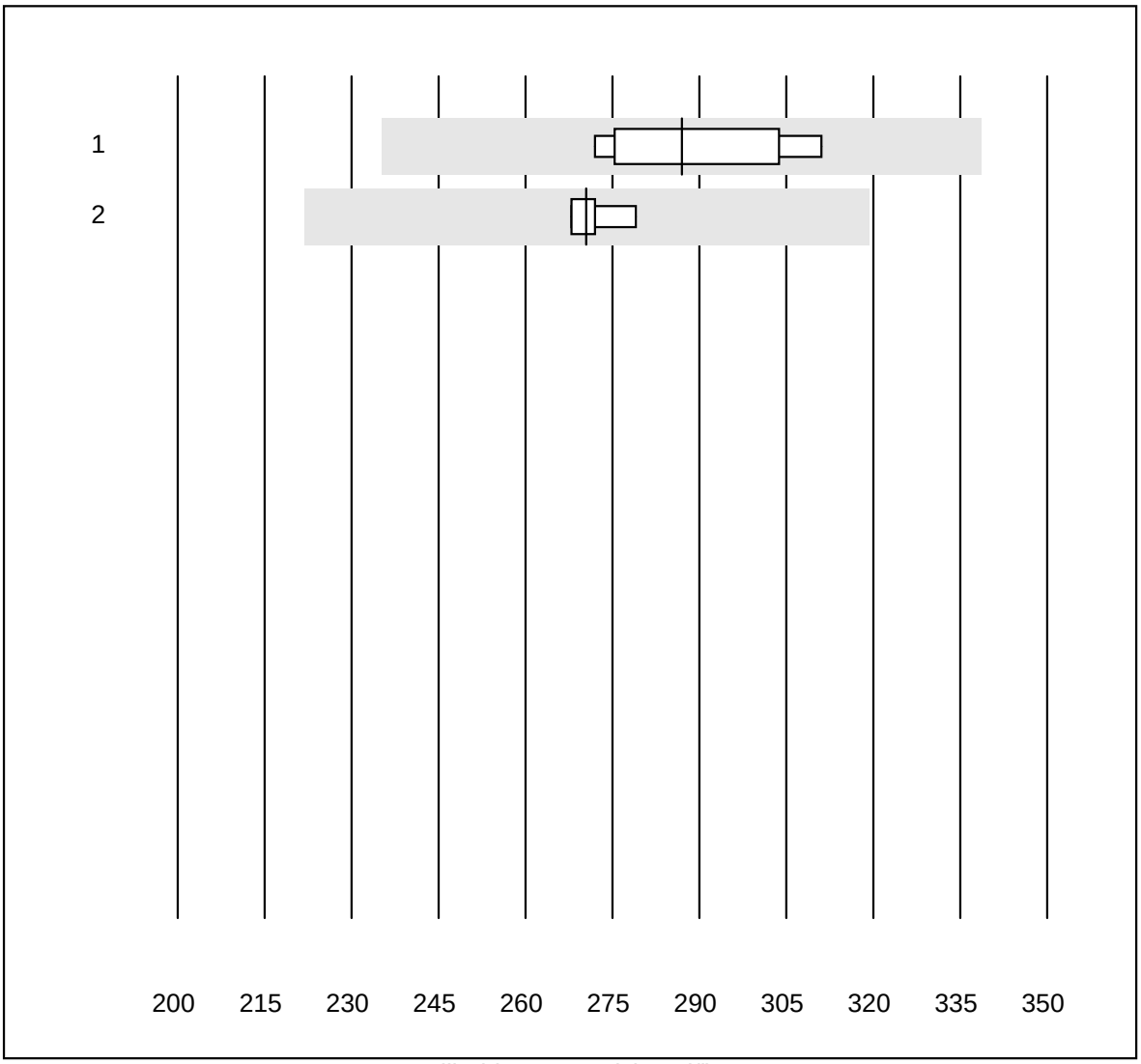


QUALAB tolerance : 18 %

Bilirubin direct (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	12	100.0	0.0	0.0	100	9.4	e*

Bilirubin neonatal

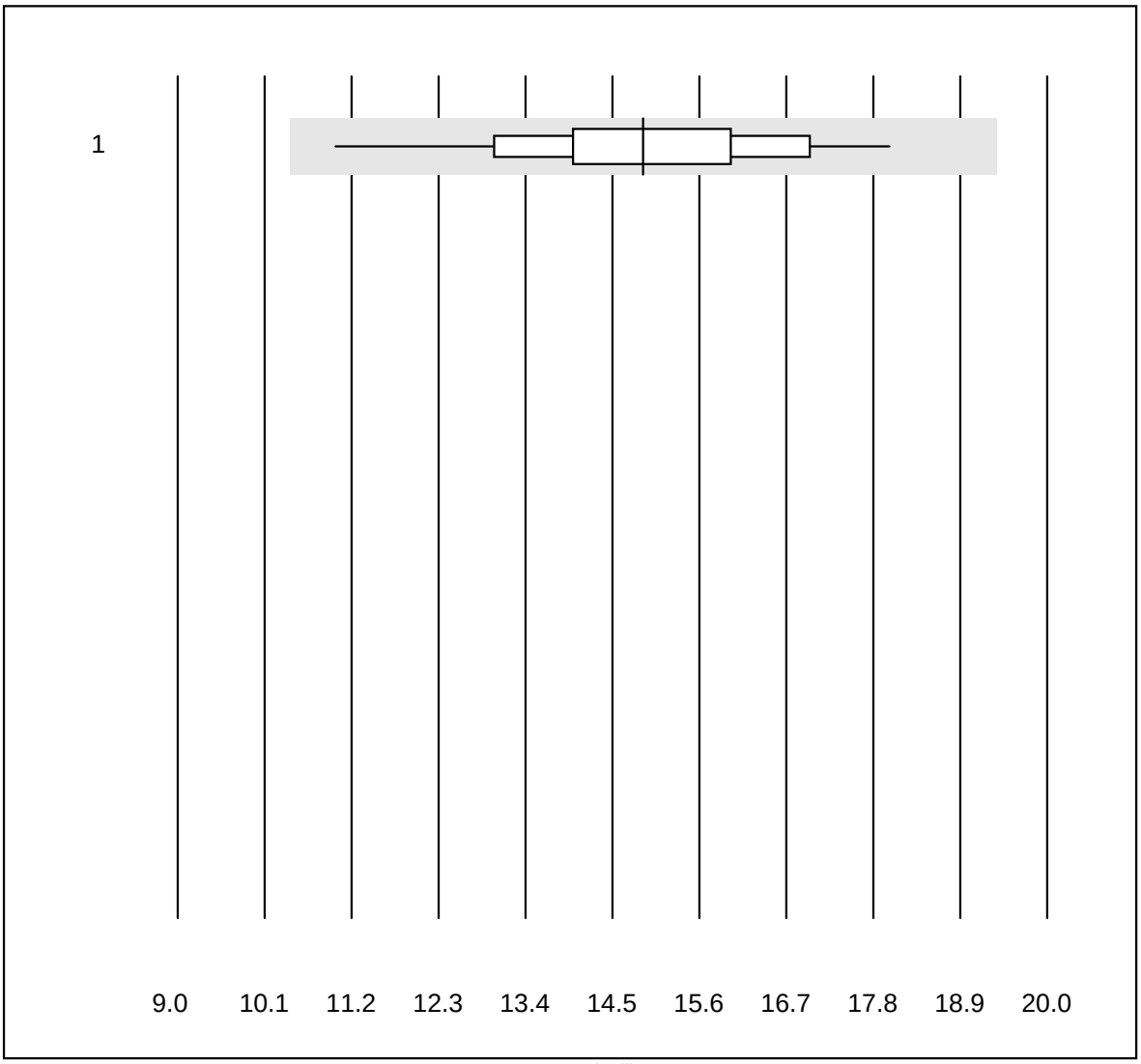


QUALAB tolerance : 18 %

Bilirubin neonatal (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	6	100.0	0.0	0.0	287	5.5	e*
2	ABL700/800 Radiomete	4	100.0	0.0	0.0	271	1.8	e

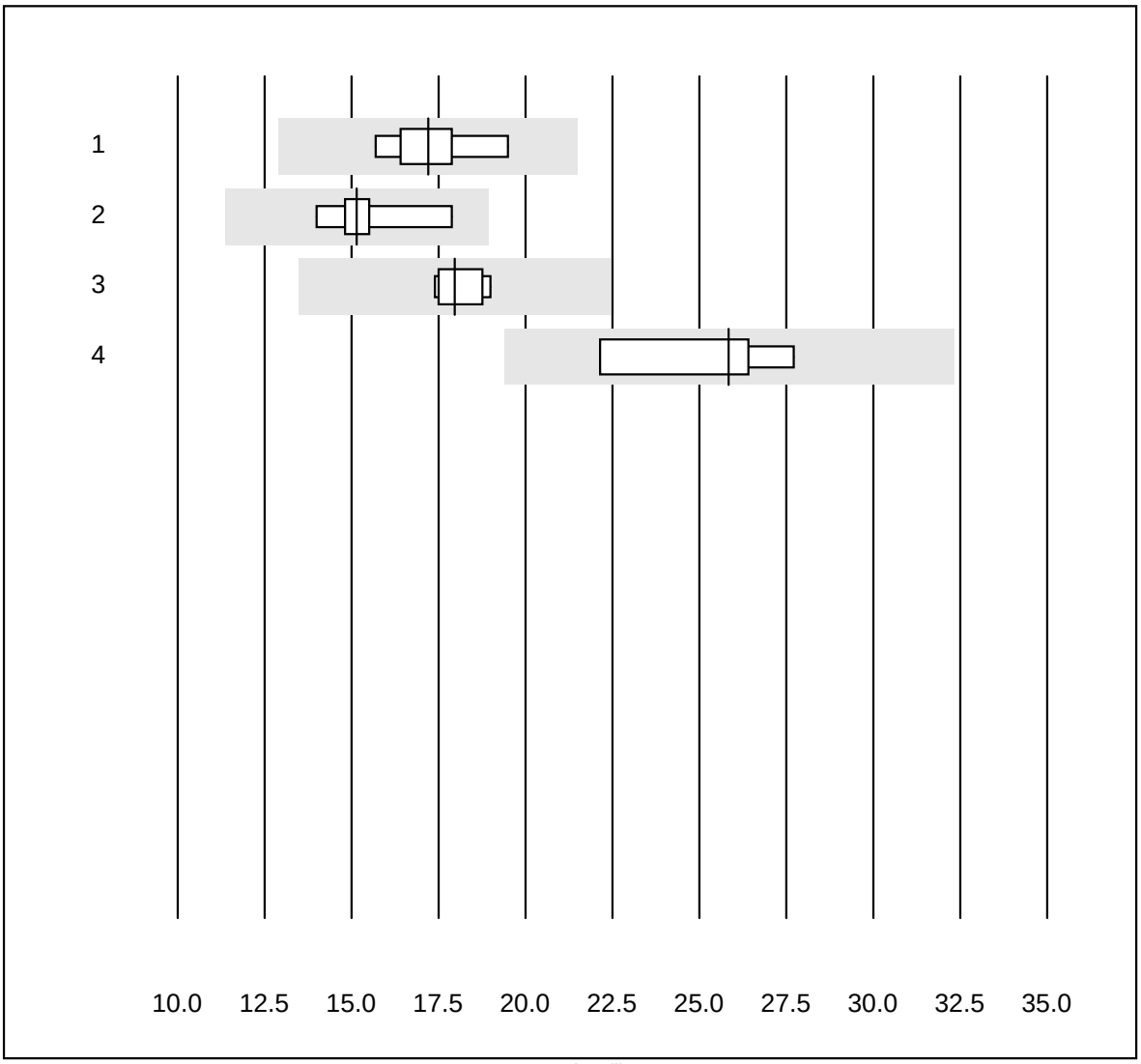
CK-MB



QUALAB tolerance : 30 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Fuji Dri-Chem	36	97.2	0.0	2.8	14.9	10.5	e

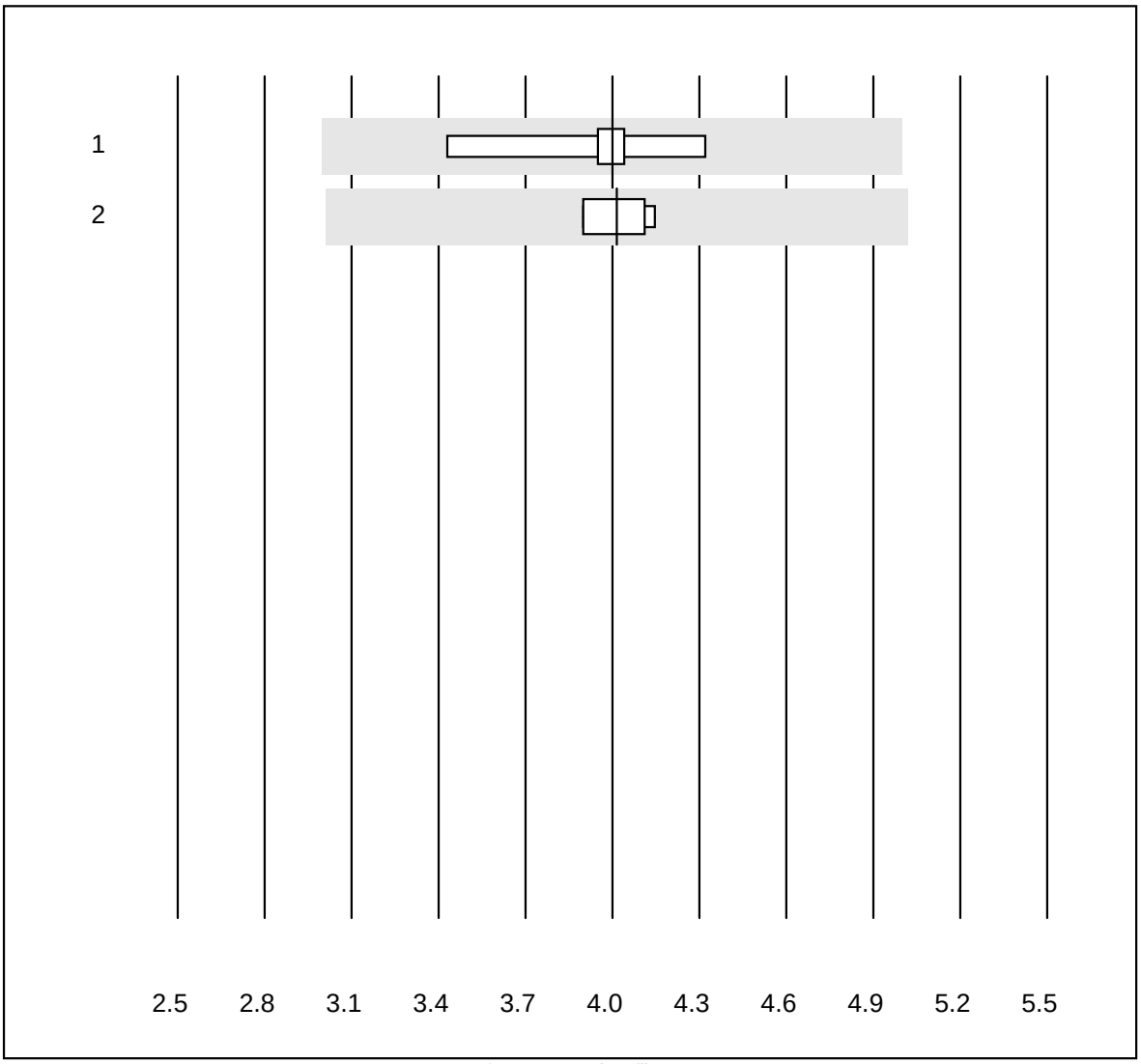
PSA



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	9	100.0	0.0	0.0	17.20	6.9	e
2	ADVIA Centaur XP/CP	5	100.0	0.0	0.0	15.15	9.4	e*
3	Architect	5	100.0	0.0	0.0	17.95	4.0	e
4	Qualigen	4	100.0	0.0	0.0	25.85	9.3	e*

free PSA

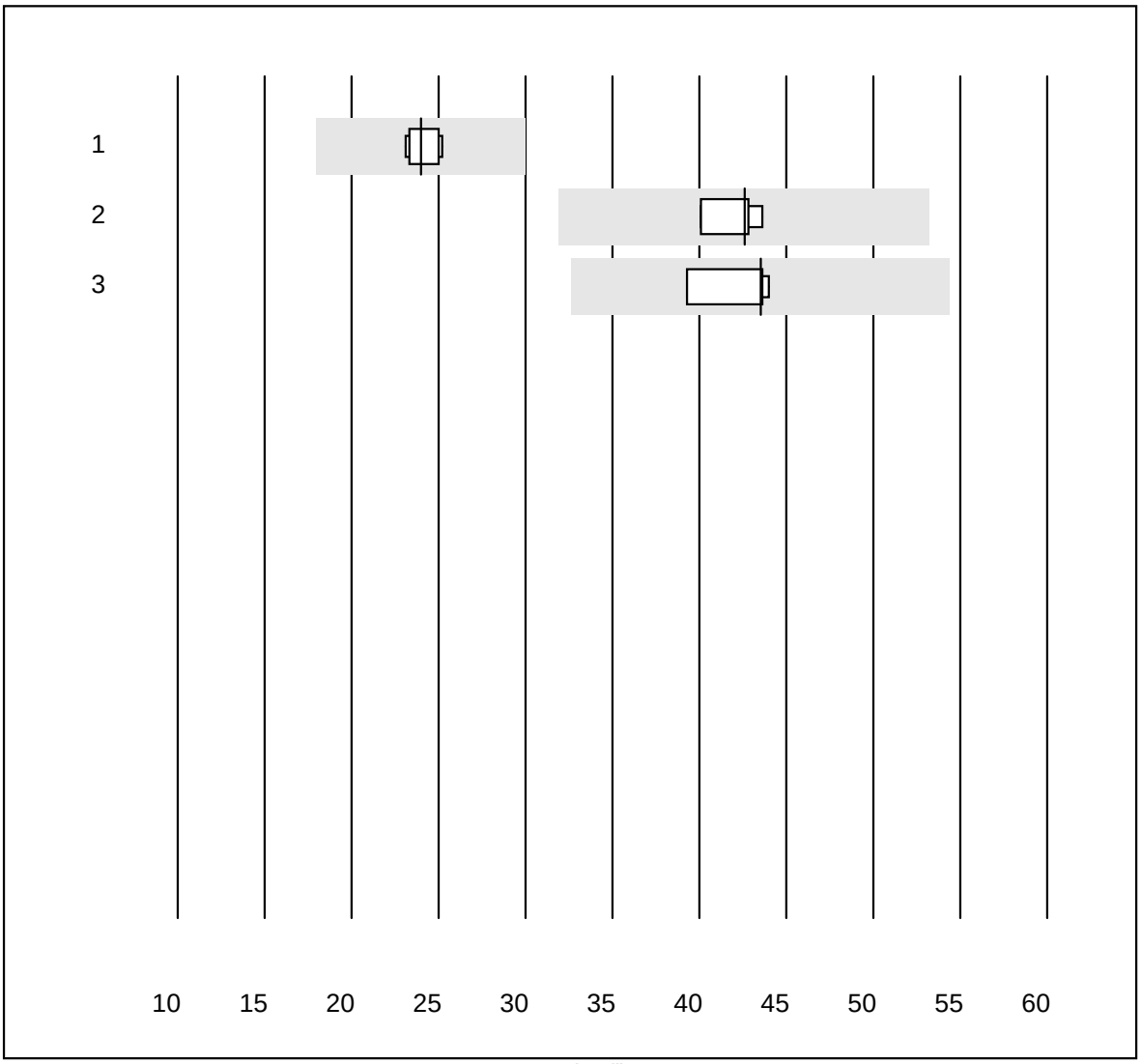


QUALAB tolerance : 25 %

free PSA (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	5	100.0	0.0	0.0	4.00	8.2	e*
2	Architect	4	100.0	0.0	0.0	4.02	3.2	e

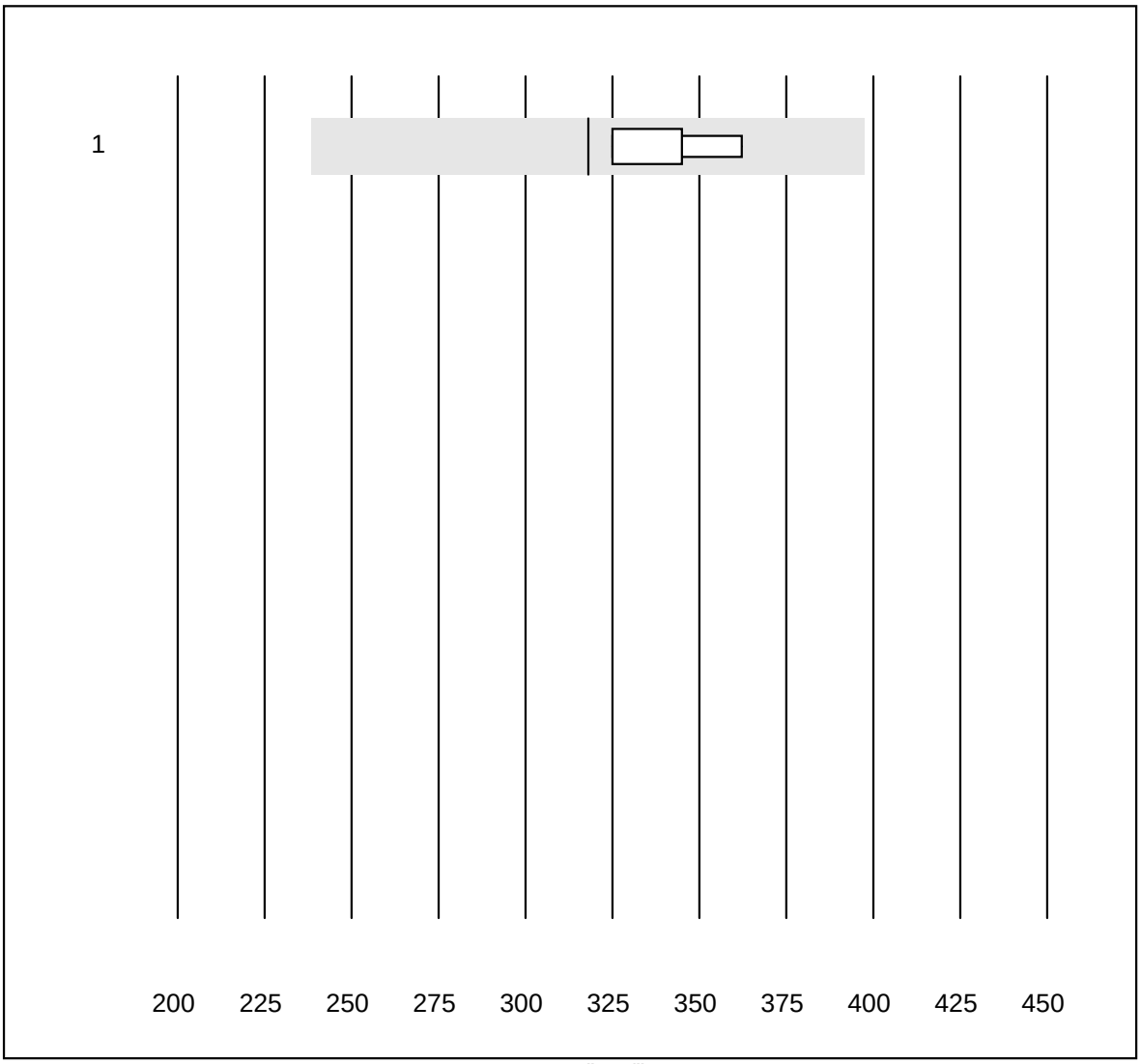
CEA



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	5	100.0	0.0	0.0	24.0	4.0	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	42.6	3.6	e
3	Architect	4	100.0	0.0	0.0	43.5	5.2	e

CA 125

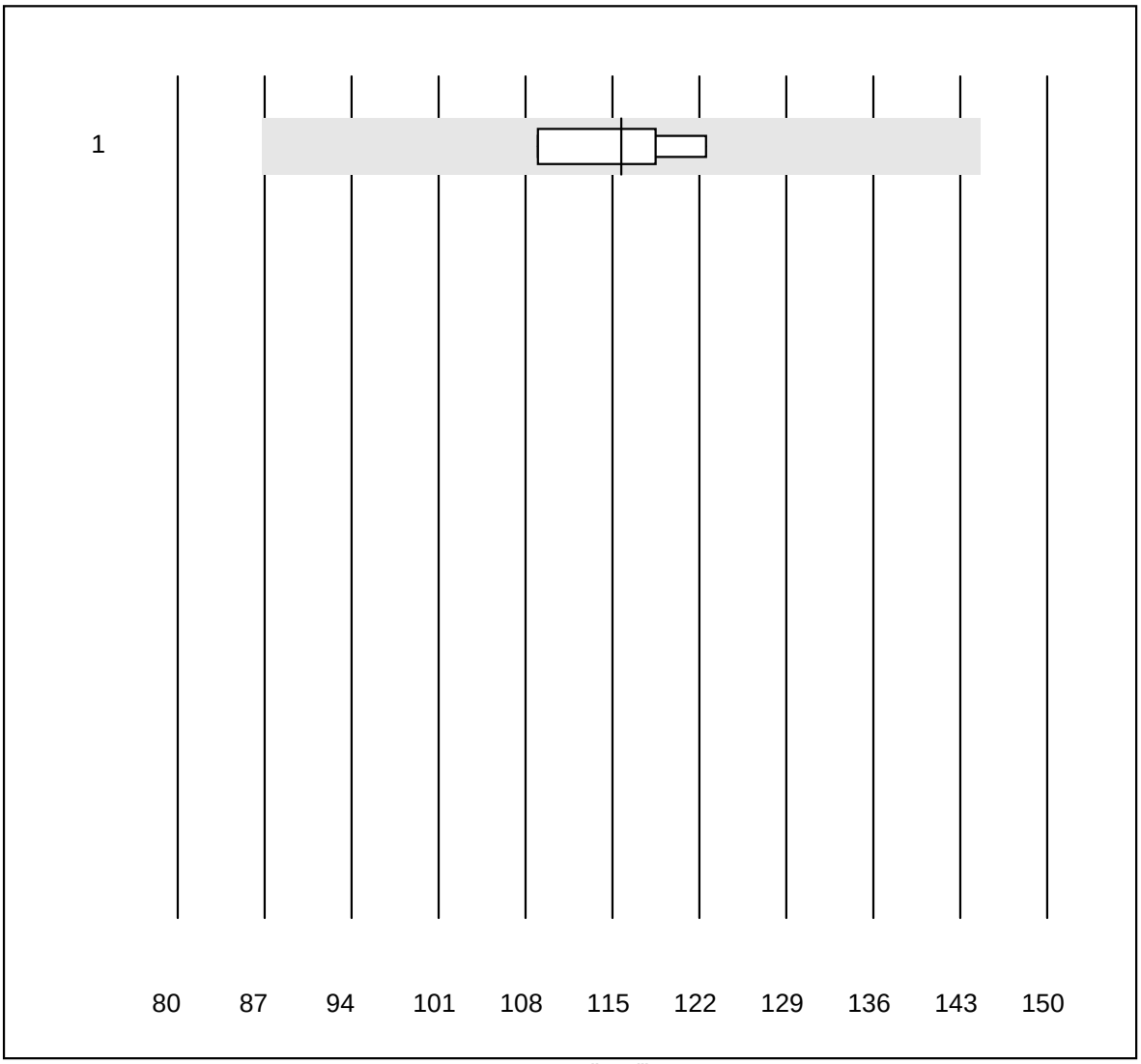


QUALAB tolerance : 25 %

CA 125 (kIU/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Architect	4	100.0	0.0	0.0	318.0	4.8	a

CA 15-3

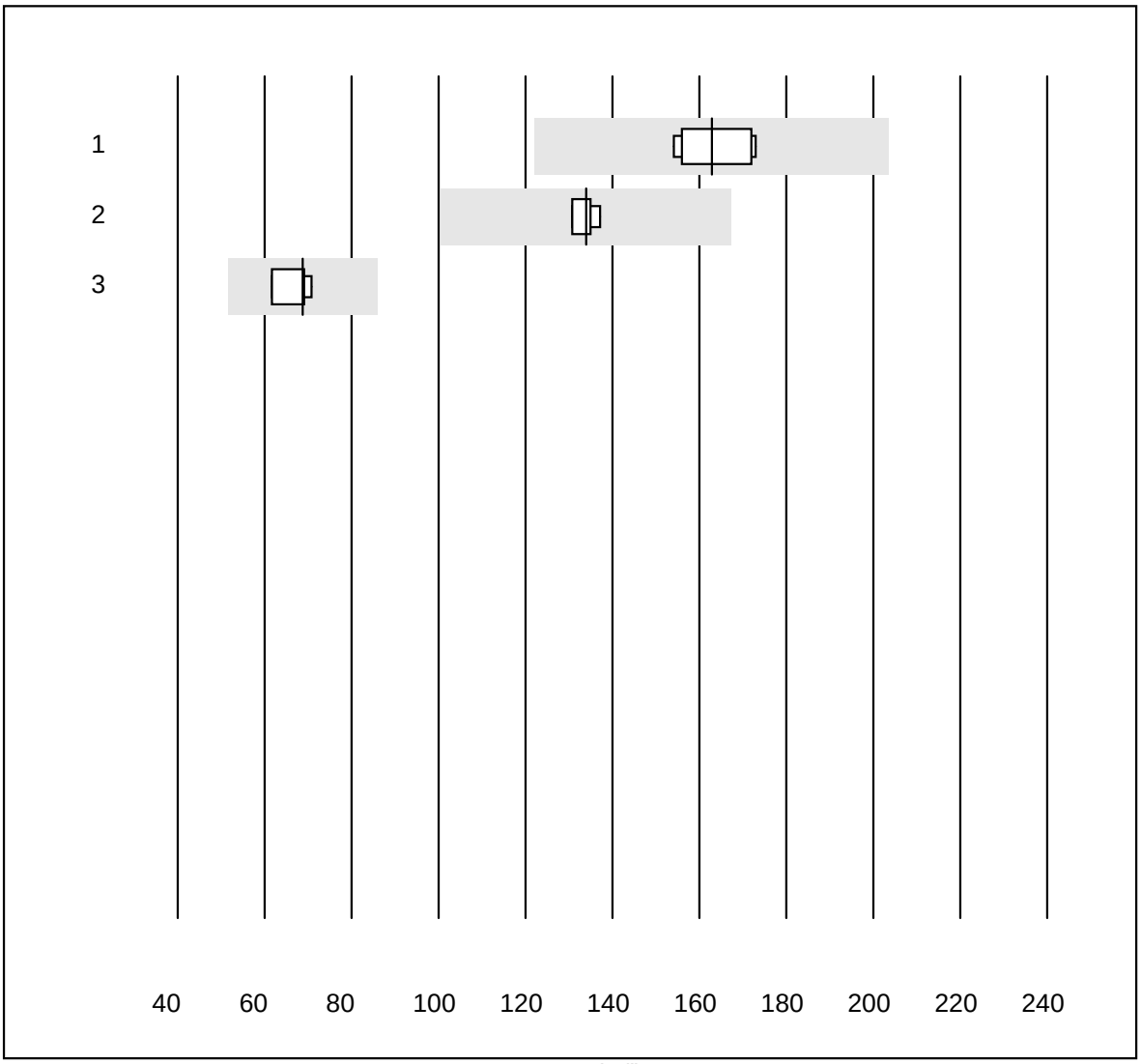


QUALAB tolerance : 25 %

CA 15-3 (kIU/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Architect	4	100.0	0.0	0.0	115.7	5.1	e

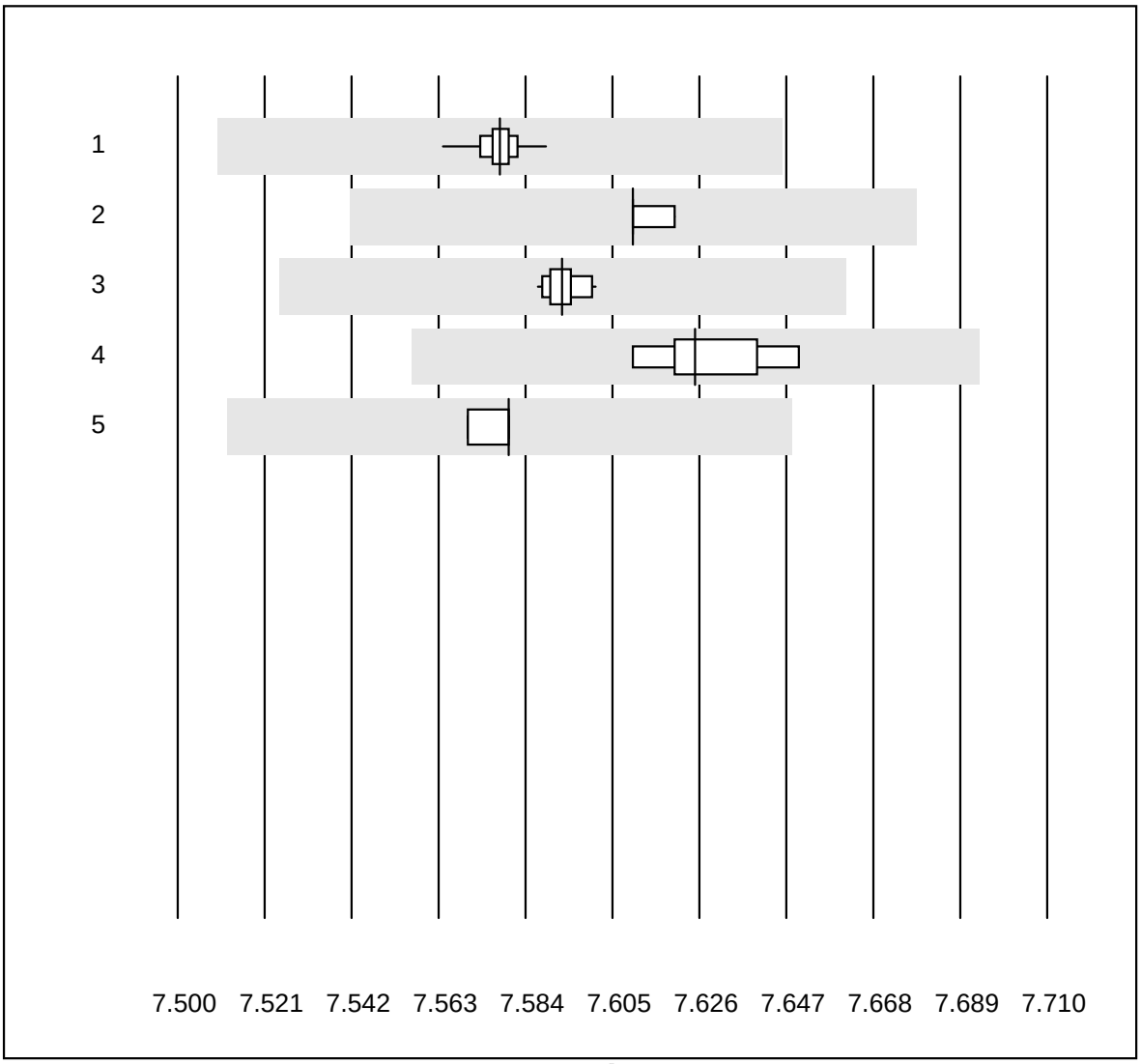
HCG qn



QUALAB tolerance : 25 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas E / Elecsys	5	100.0	0.0	0.0	163	5.4	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	134	2.0	e
3	Vidas	4	100.0	0.0	0.0	69	5.9	e

pH OR

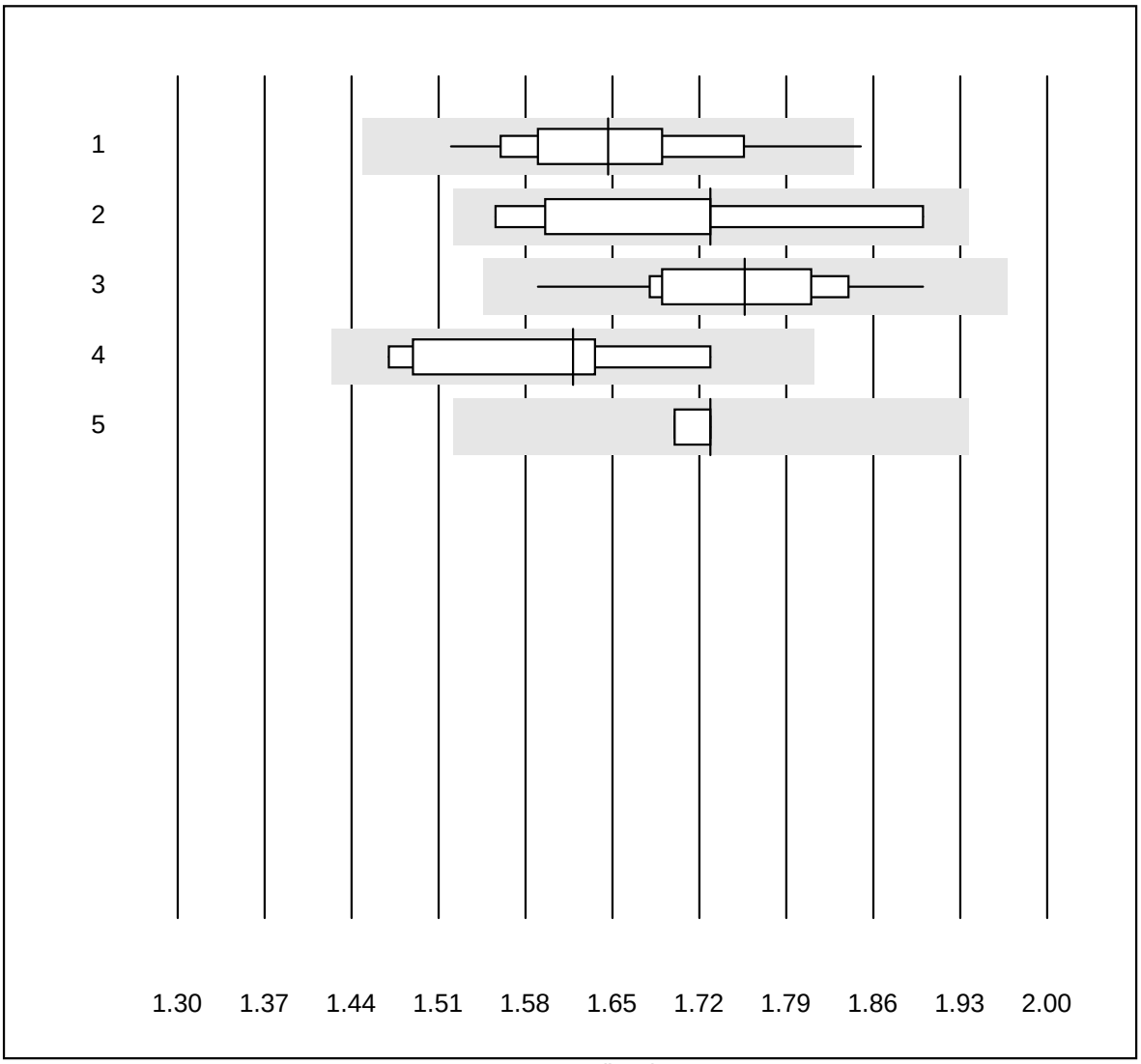


QUALAB tolerance : 1 %

pH OR ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	78	100.0	0.0	0.0	7.58	0.0	e
2	Radiometer NPT-7	8	100.0	0.0	0.0	7.61	0.1	e
3	ABL 90	19	100.0	0.0	0.0	7.59	0.1	e
4	ABL 80 / Coox	8	100.0	0.0	0.0	7.63	0.2	e
5	ABL 5	6	100.0	0.0	0.0	7.58	0.1	e

pCO2 OR

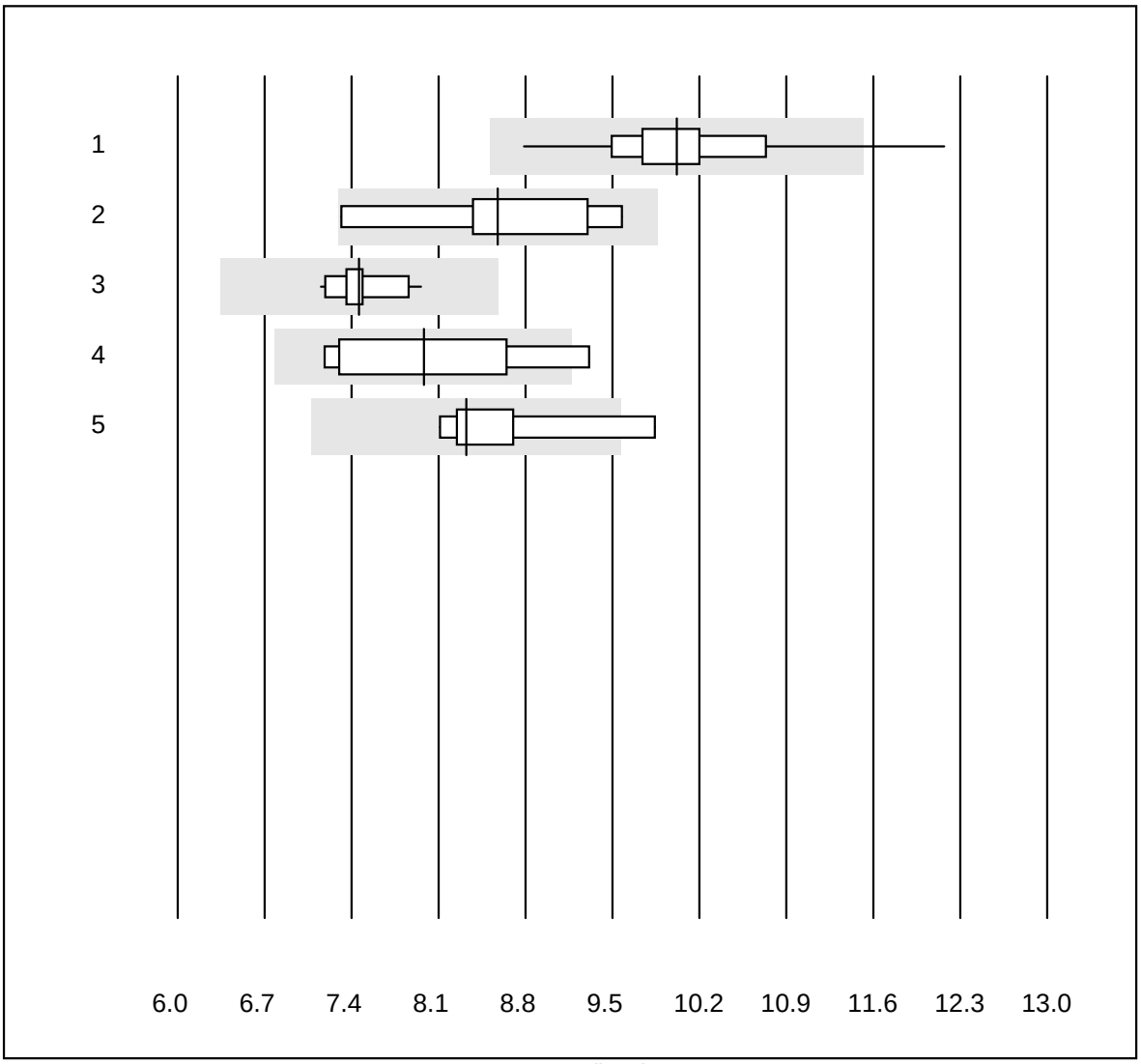


QUALAB tolerance : 12 %

pCO2 OR (kPa)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	77	98.7	1.3	0.0	1.65	4.4	e
2	Radiometer NPT-7	8	100.0	0.0	0.0	1.73	7.3	e*
3	ABL 90	19	94.7	0.0	5.3	1.76	4.3	e
4	ABL 80 / Coox	8	100.0	0.0	0.0	1.62	5.3	e*
5	ABL 5	6	100.0	0.0	0.0	1.73	0.9	e

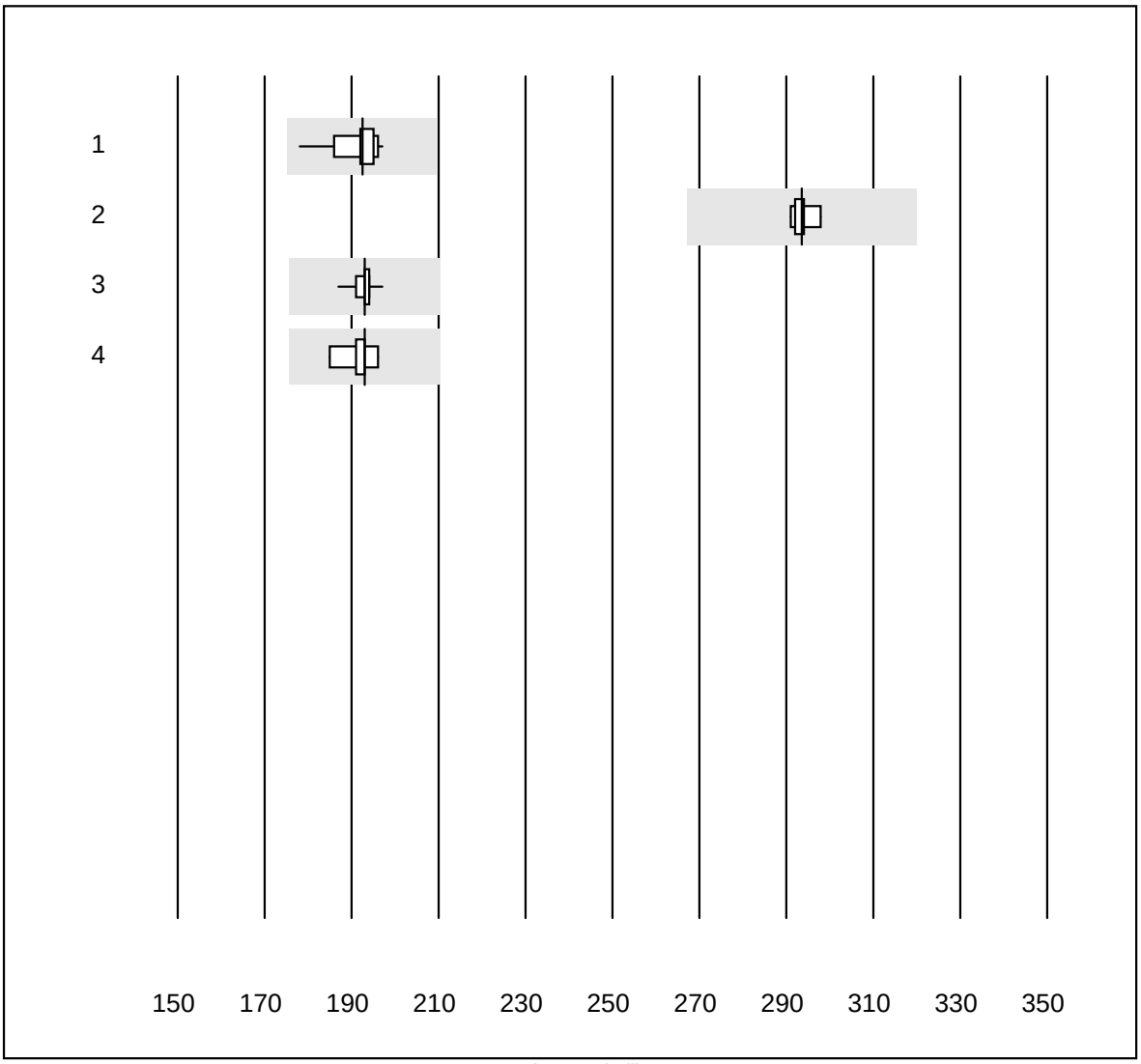
pO2 OR



QUALAB tolerance : 15 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	73	95.9	4.1	0.0	10.02	6.1	e
2	Radiometer NPT-7	8	87.5	0.0	12.5	8.58	8.5	e*
3	ABL 90	19	89.5	0.0	10.5	7.46	2.9	e
4	ABL 80 / Coox	8	87.5	12.5	0.0	7.98	9.5	e*
5	ABL 5	6	83.3	16.7	0.0	8.32	7.5	e*

ctHb OR

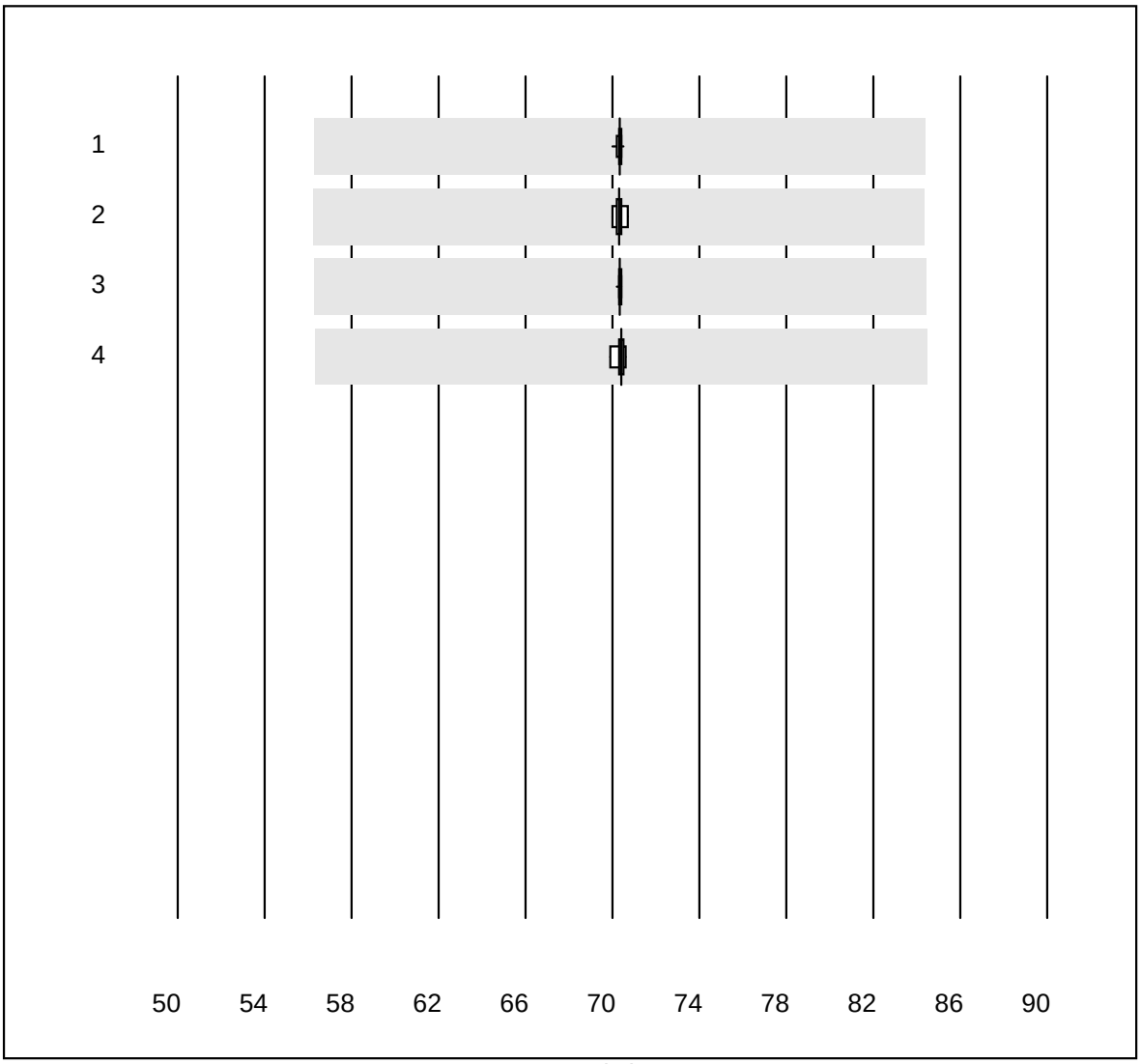


QUALAB tolerance : 9 %

ctHb OR (g/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	64	96.9	0.0	3.1	192.5	2.2	e
2	Radiometer NPT-7	6	83.3	0.0	16.7	293.5	0.9	e
3	ABL 90	18	100.0	0.0	0.0	193.0	1.0	e
4	ABL 80 / Coox	7	100.0	0.0	0.0	193.0	1.8	e

sO2 OR

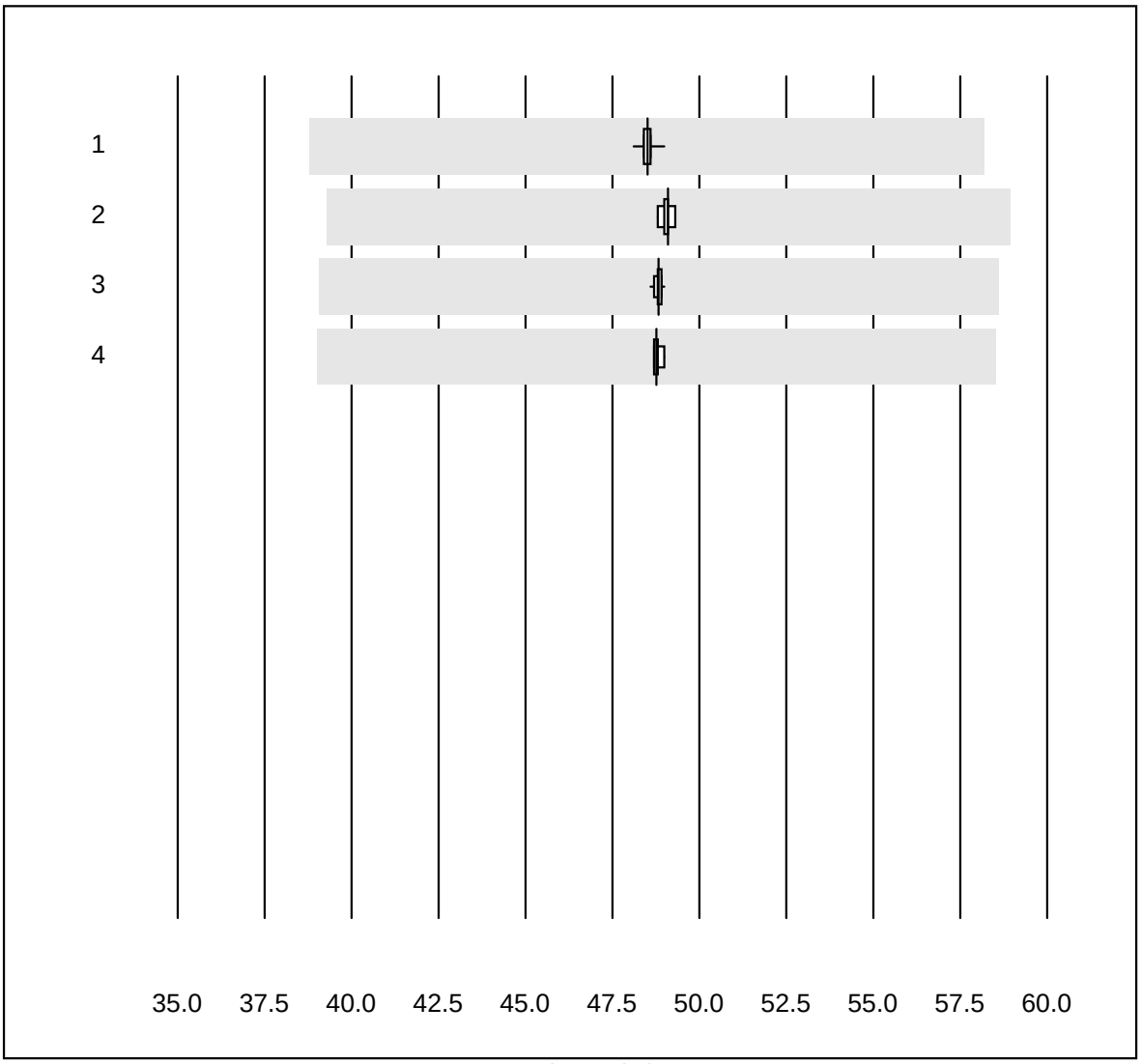


QUALAB tolerance : 20 %

sO2 OR (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	52	100.0	0.0	0.0	70.329	0.1	e
2	Radiometer NPT-7	5	100.0	0.0	0.0	70.300	0.4	e
3	ABL 90	18	100.0	0.0	0.0	70.350	0.1	e
4	ABL 80 / Coox	7	100.0	0.0	0.0	70.400	0.3	e

FO2Hb OR

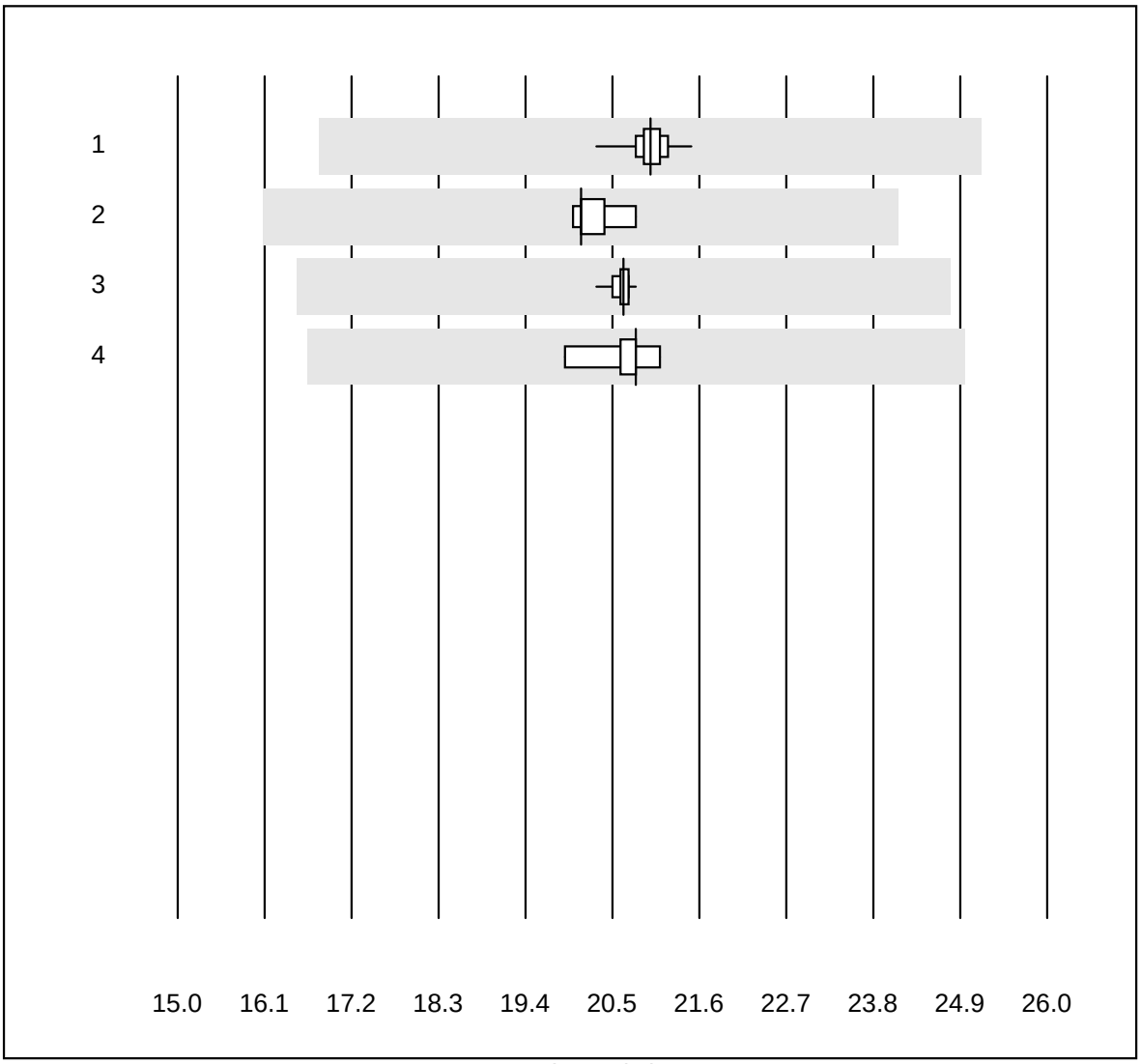


QUALAB tolerance : 20 %

FO2Hb OR (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	48	100.0	0.0	0.0	48.502	0.3	e
2	Radiometer NPT-7	7	100.0	0.0	0.0	49.100	0.3	e
3	ABL 90	18	100.0	0.0	0.0	48.822	0.2	e
4	ABL 80 / Coox	8	100.0	0.0	0.0	48.750	0.2	e

FCOHb OR

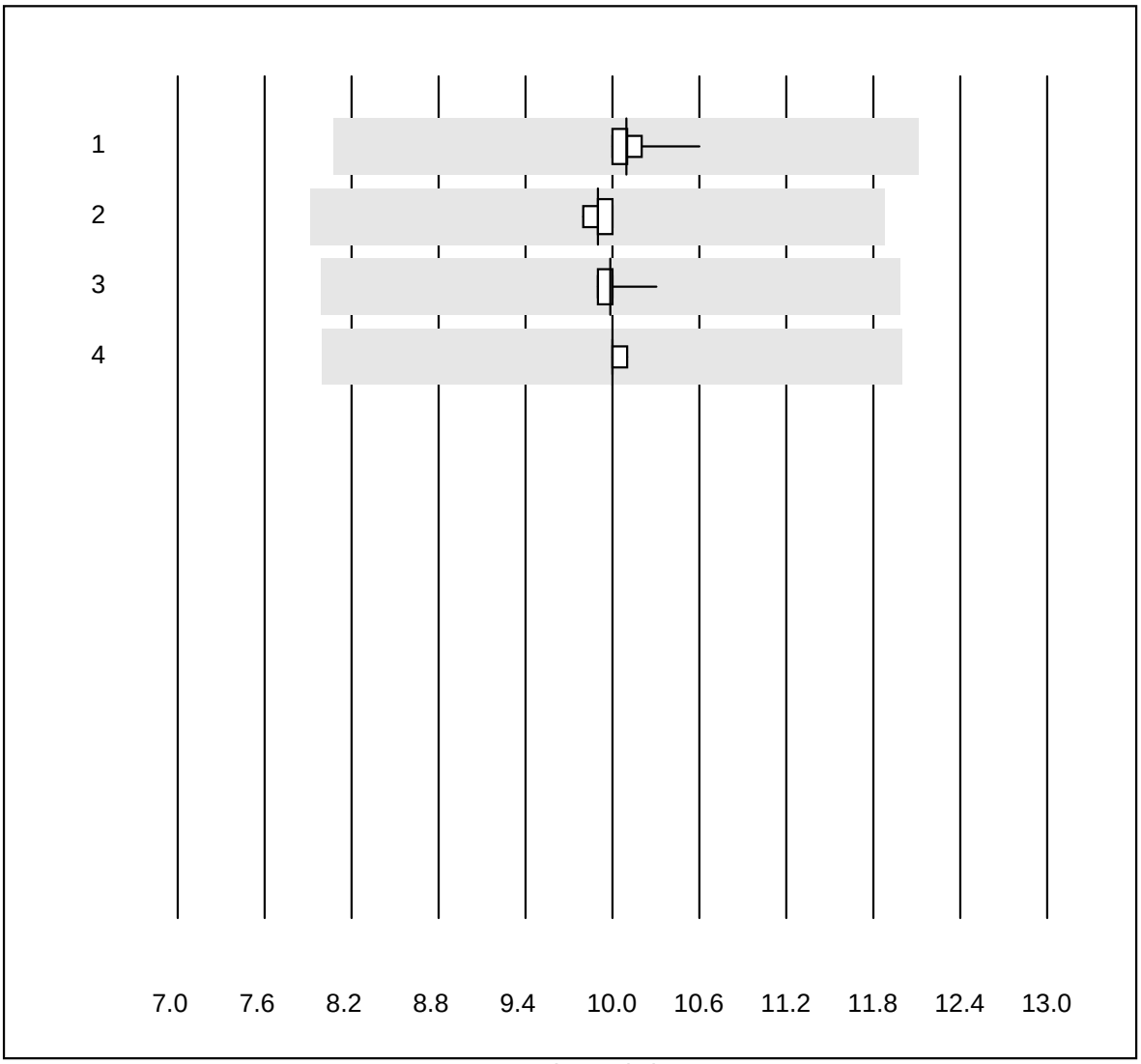


QUALAB tolerance : 20 %

FCOHb OR (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	49	100.0	0.0	0.0	20.977	0.9	e
2	Radiometer NPT-7	7	100.0	0.0	0.0	20.100	1.4	e
3	ABL 90	18	100.0	0.0	0.0	20.639	0.5	e
4	ABL 80 / Coox	8	100.0	0.0	0.0	20.800	1.7	e

FMetHb OR

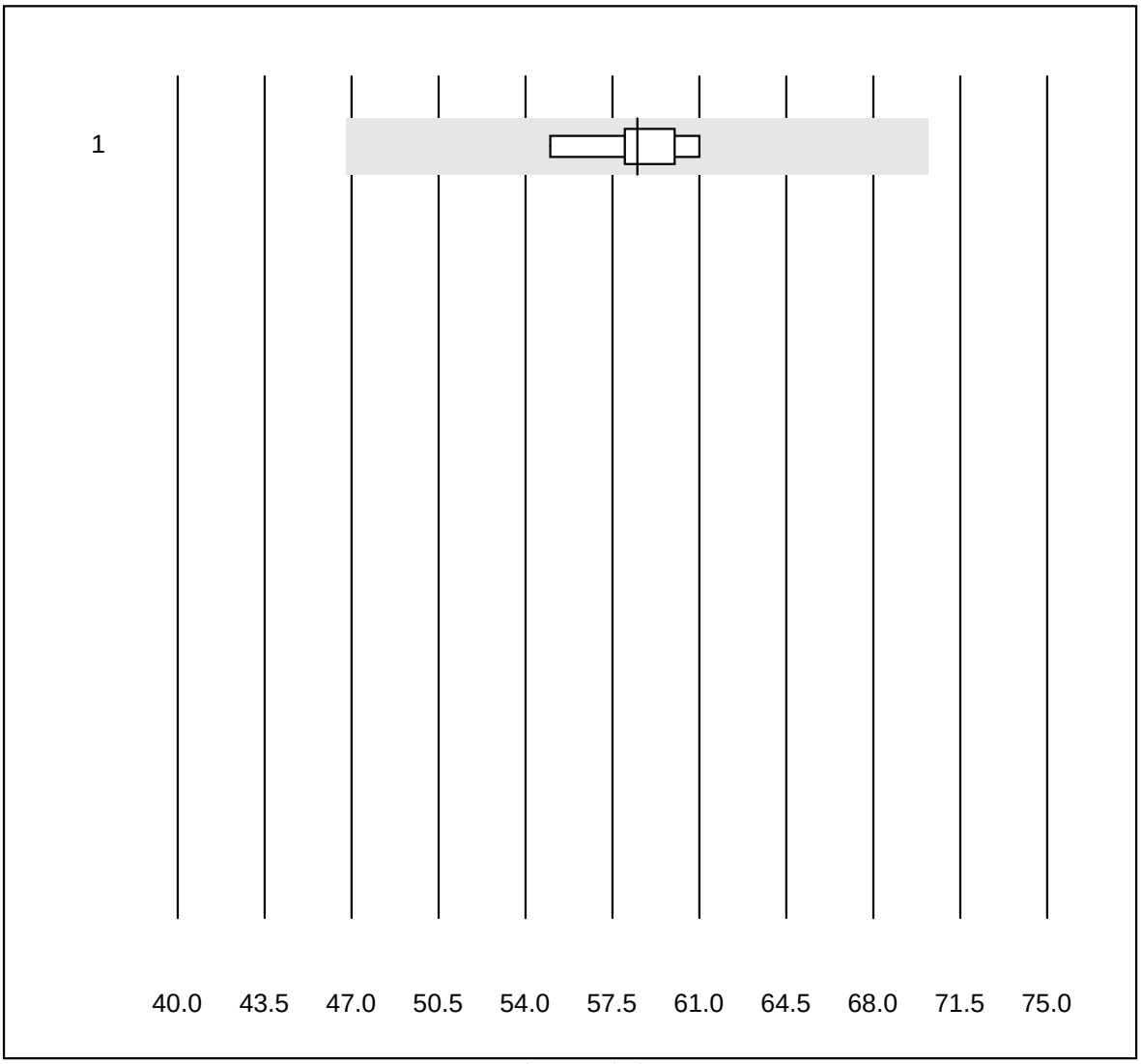


QUALAB tolerance : 20 %

FMetHb OR (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	50	100.0	0.0	0.0	10.094	1.2	e
2	Radiometer NPT-7	7	100.0	0.0	0.0	9.900	0.8	e
3	ABL 90	18	100.0	0.0	0.0	9.983	0.9	e
4	ABL 80 / Coox	8	100.0	0.0	0.0	10.000	0.4	e

FHbF OR

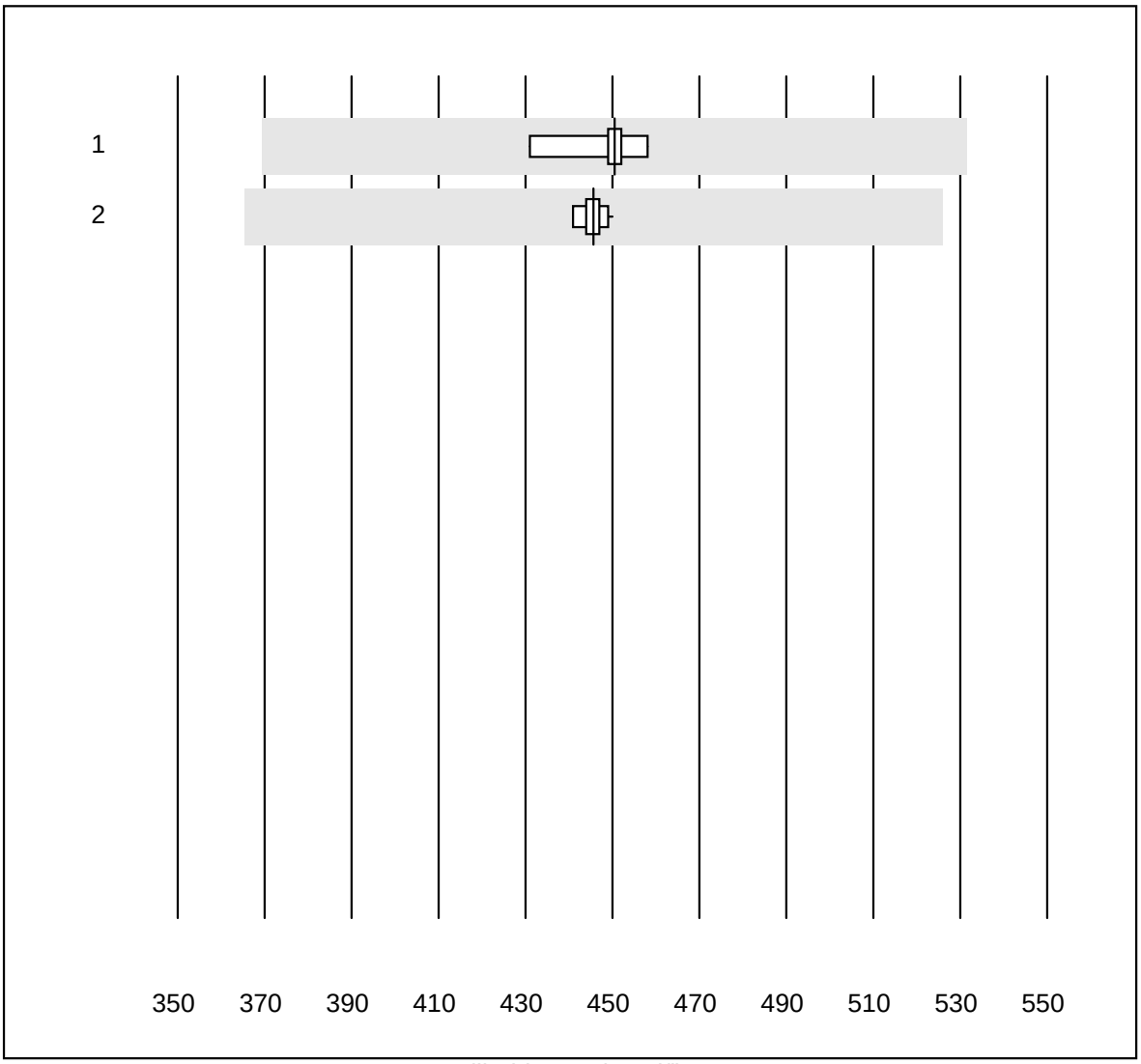


QUALAB tolerance : 20 %

FHbF OR (%)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL 90	6	100.0	0.0	0.0	58.500	3.5	e

Bilirubin OR

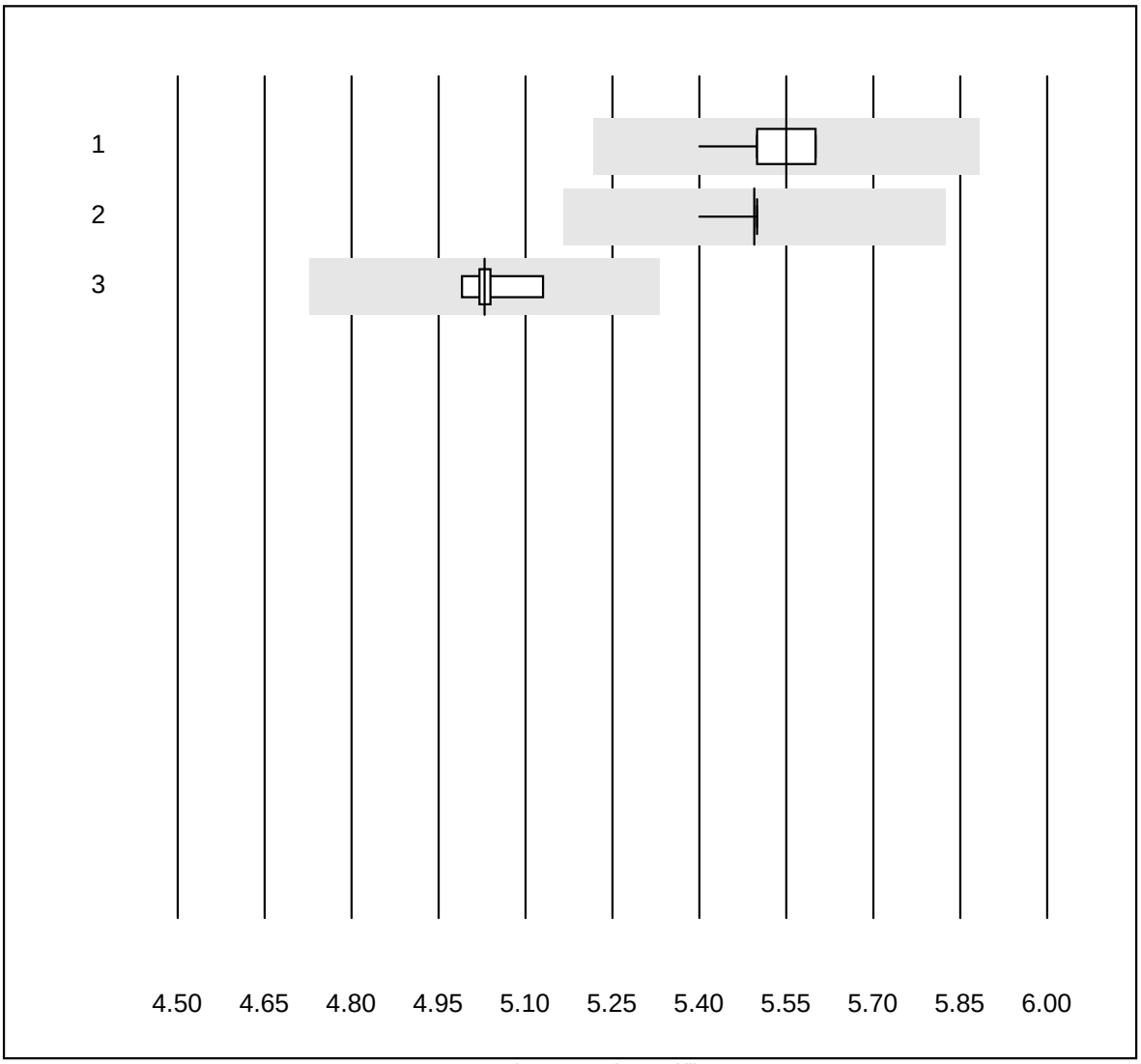


QUALAB tolerance : 18 %

Bilirubin OR (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	8	100.0	0.0	0.0	450.5	1.7	e
2	ABL 90	10	100.0	0.0	0.0	445.7	0.6	e

Potassium OR

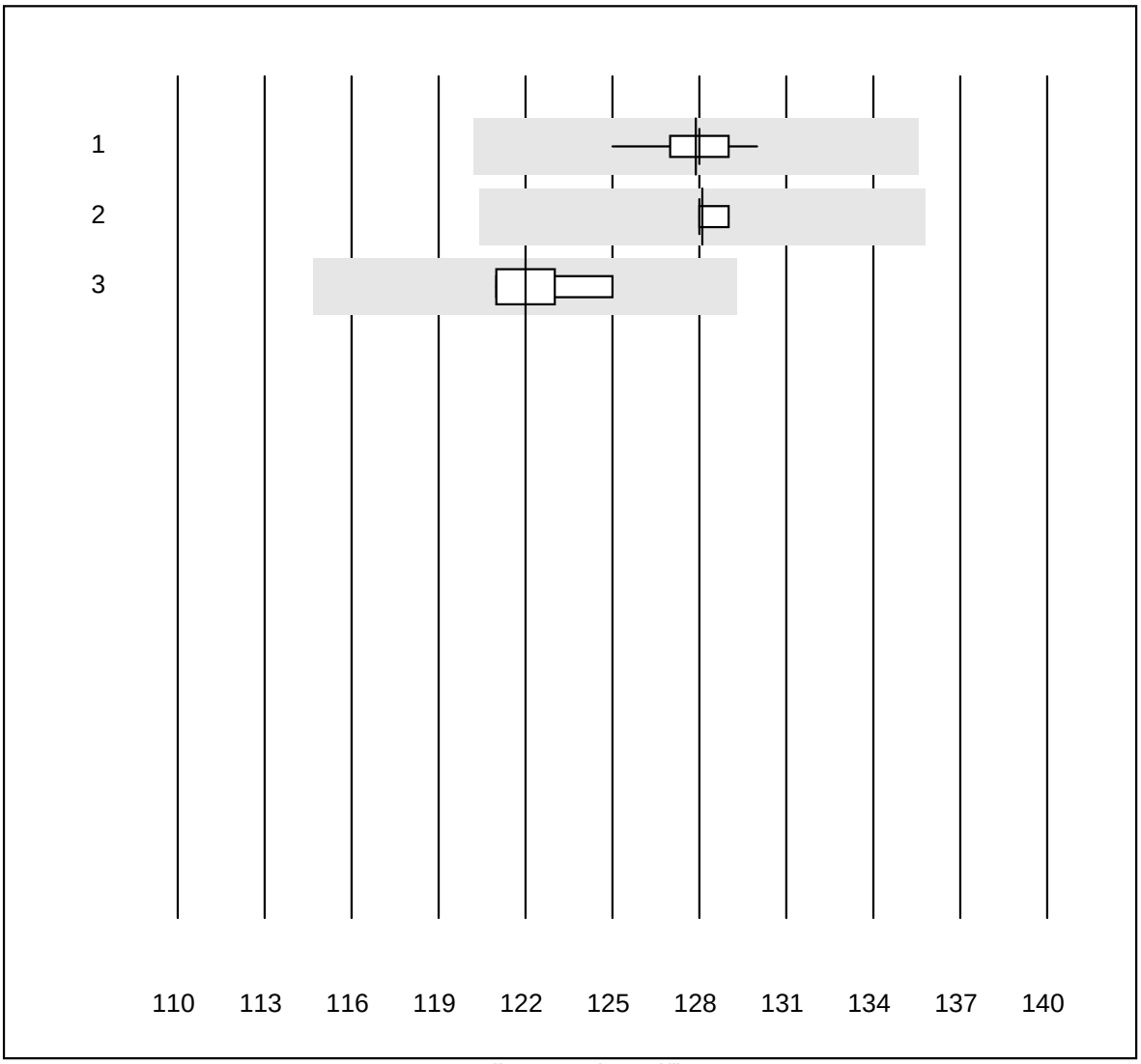


QUALAB tolerance : 6 %

Potassium OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	64	98.4	0.0	1.6	5.6	1.0	e
2	ABL 90	19	100.0	0.0	0.0	5.5	0.4	e
3	ABL 80 / Coox	5	100.0	0.0	0.0	5.0	1.0	e

Sodium OR

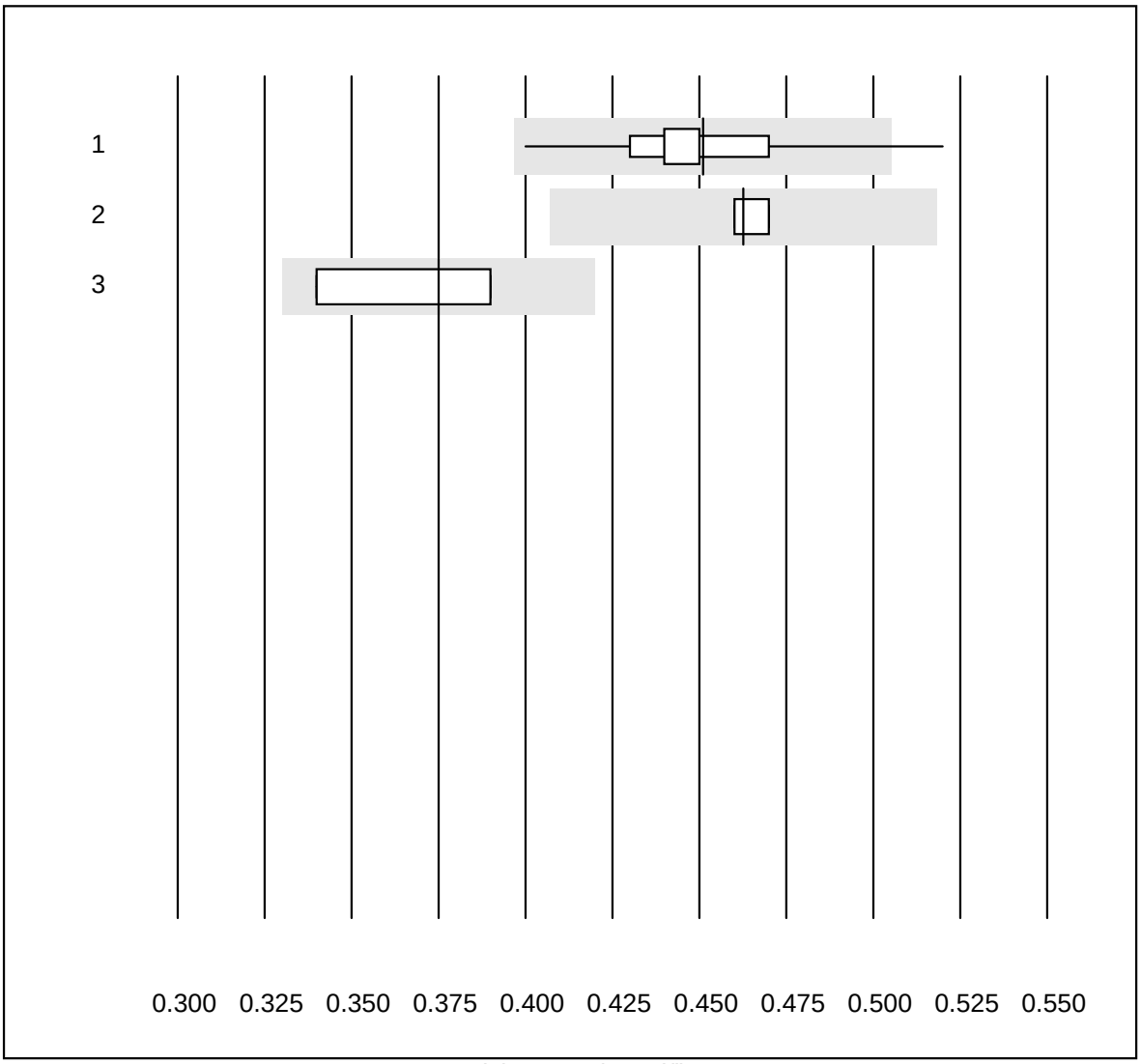


QUALAB tolerance : 6 %

Sodium OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	63	96.8	0.0	3.2	127.9	0.7	e
2	ABL 90	19	100.0	0.0	0.0	128.1	0.2	e
3	ABL 80 / Coox	4	100.0	0.0	0.0	122.0	1.6	e*

Calcium OR

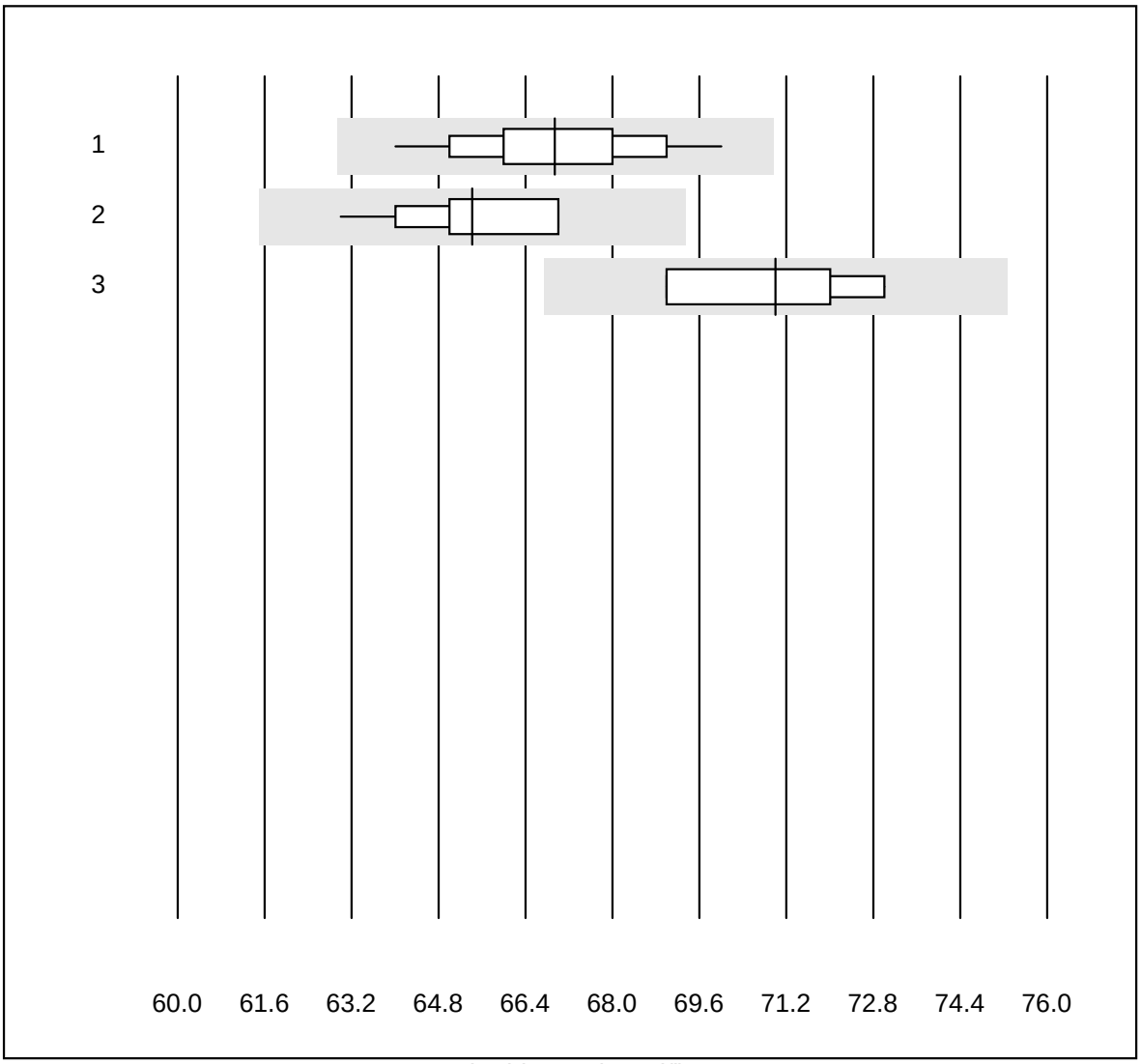


QUALAB tolerance : 12 %

Calcium OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	64	98.4	1.6	0.0	0.45	4.1	e
2	ABL 90	19	100.0	0.0	0.0	0.46	1.0	e
3	ABL 80 / Coox	4	100.0	0.0	0.0	0.38	6.6	e*

Choride OR

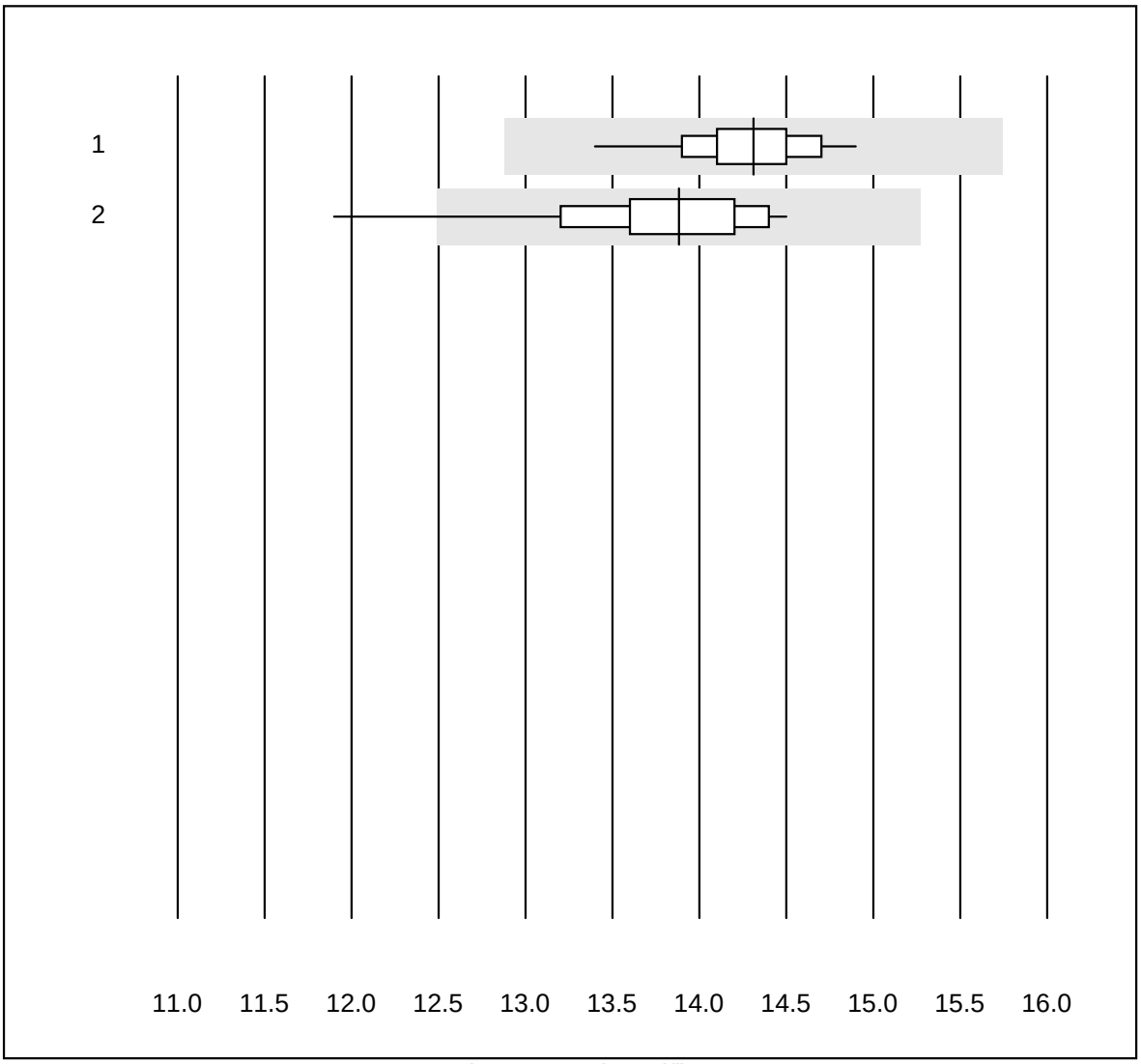


QUALAB tolerance : 6 %

Choride OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	54	98.1	0.0	1.9	66.94	2.1	e
2	ABL 90	19	100.0	0.0	0.0	65.42	1.9	e
3	ABL 80 / Coox	5	100.0	0.0	0.0	71.00	2.5	e*

Glucose OR

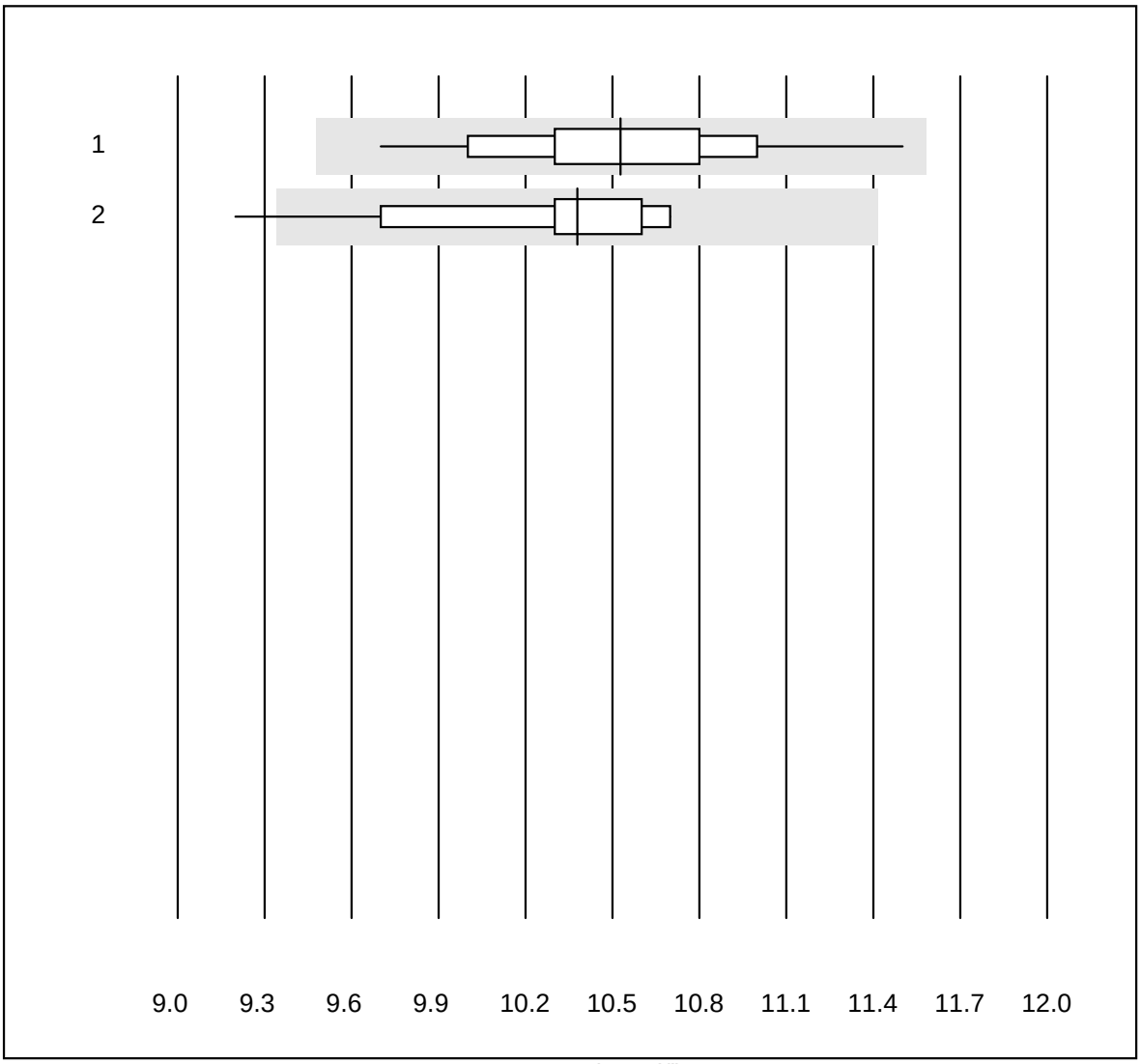


QUALAB tolerance : 10 %

Glucose OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	65	100.0	0.0	0.0	14.3	2.1	e
2	ABL 90	19	94.7	5.3	0.0	13.9	4.3	e

Lactate OR

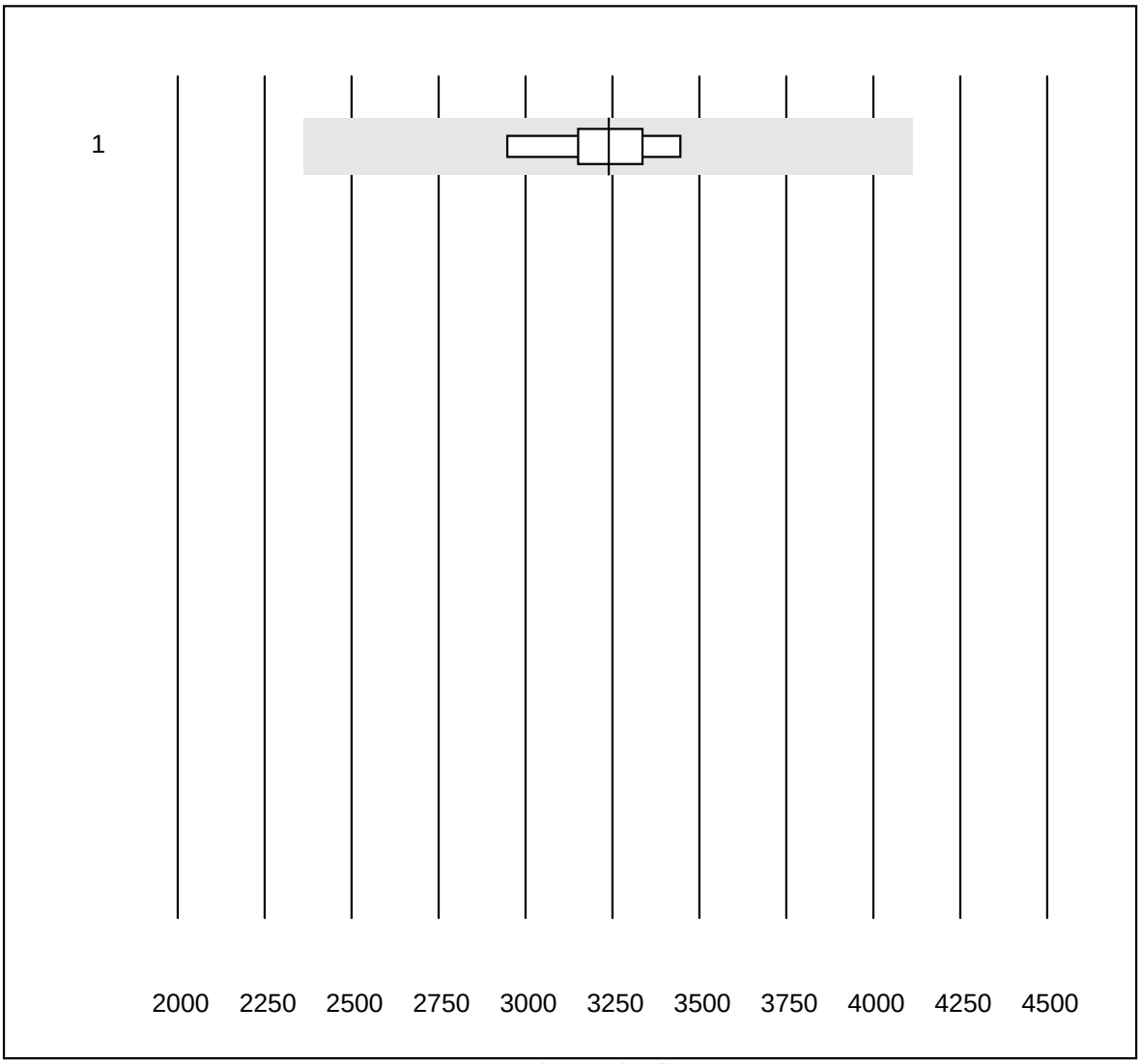


QUALAB tolerance : 10 %

Lactate OR (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ABL700/800 Radiomete	67	100.0	0.0	0.0	10.53	3.5	e
2	ABL 90	19	89.4	5.3	5.3	10.38	3.9	e

BNP Plasma

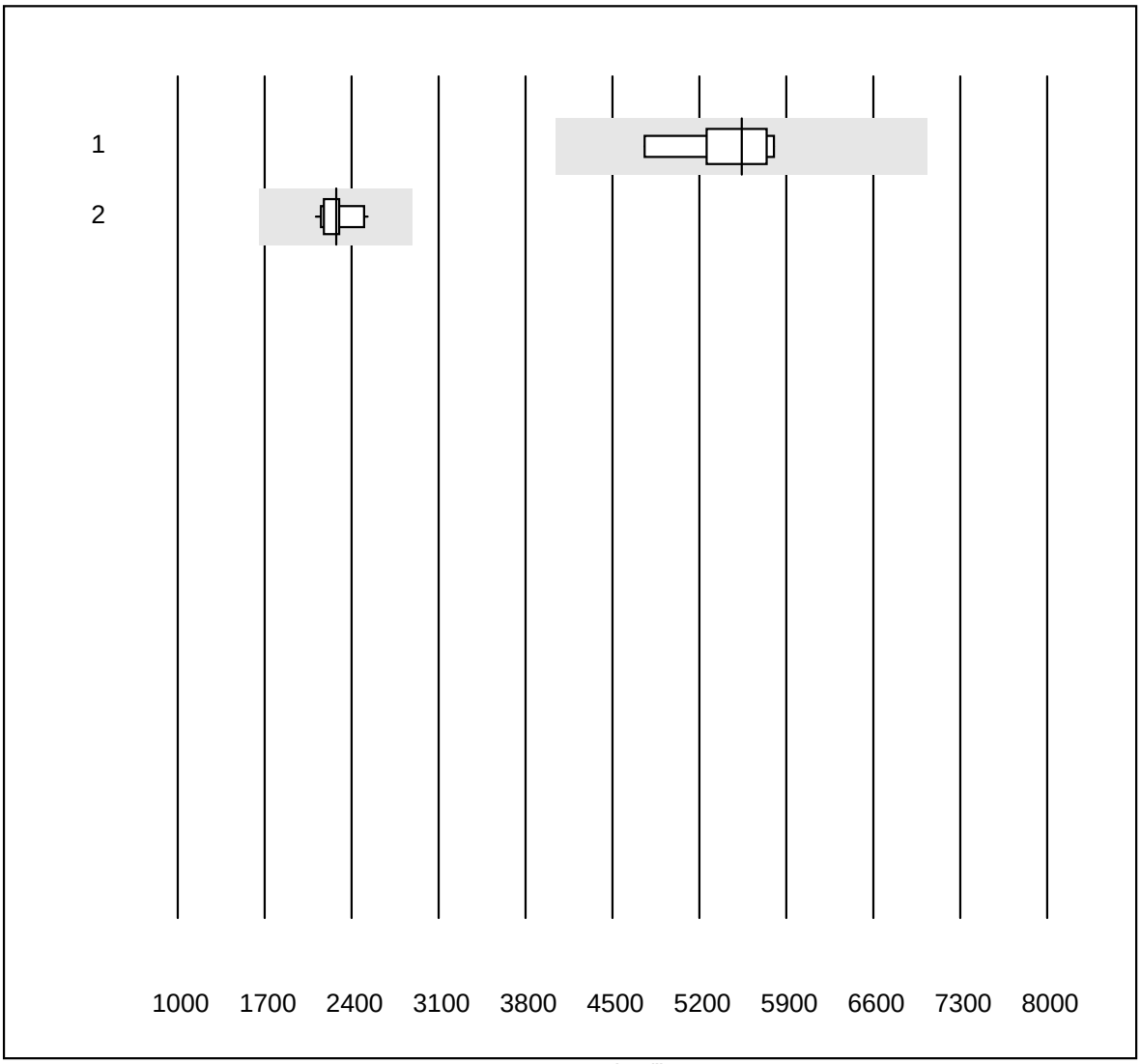


QUALAB tolerance : 27 %

BNP Plasma (ng/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	ADVIA Centaur XP/CP	5	100.0	0.0	0.0	3239.0	5.9	e

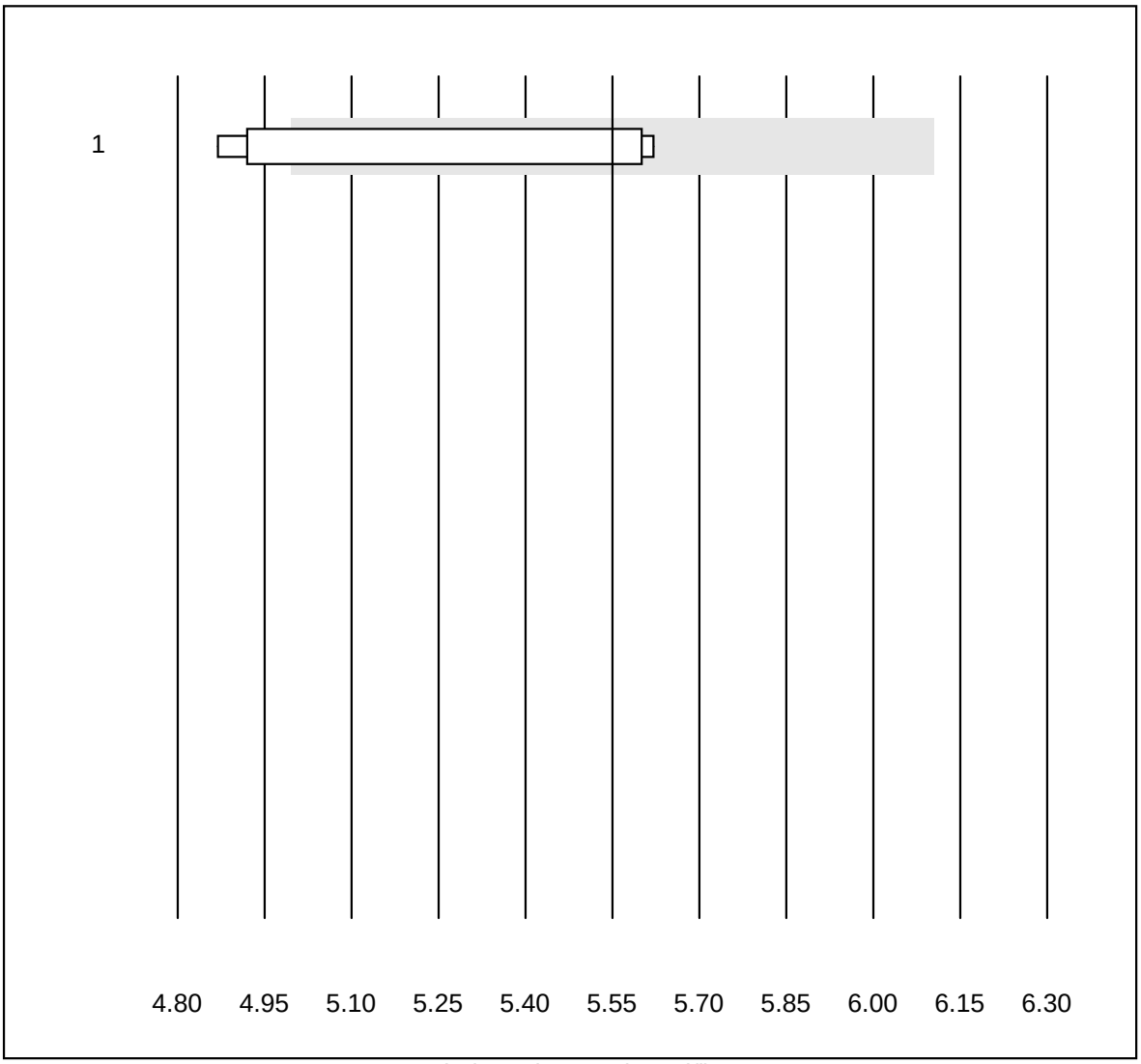
NT-proBNP



QUALAB tolerance : 27 %

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	AQT 90 FLEX	6	100.0	0.0	0.0	5540.0	7.1	e
2	Cobas E / Elecsys	12	100.0	0.0	0.0	2275.2	5.9	e

Cholesterin PTS

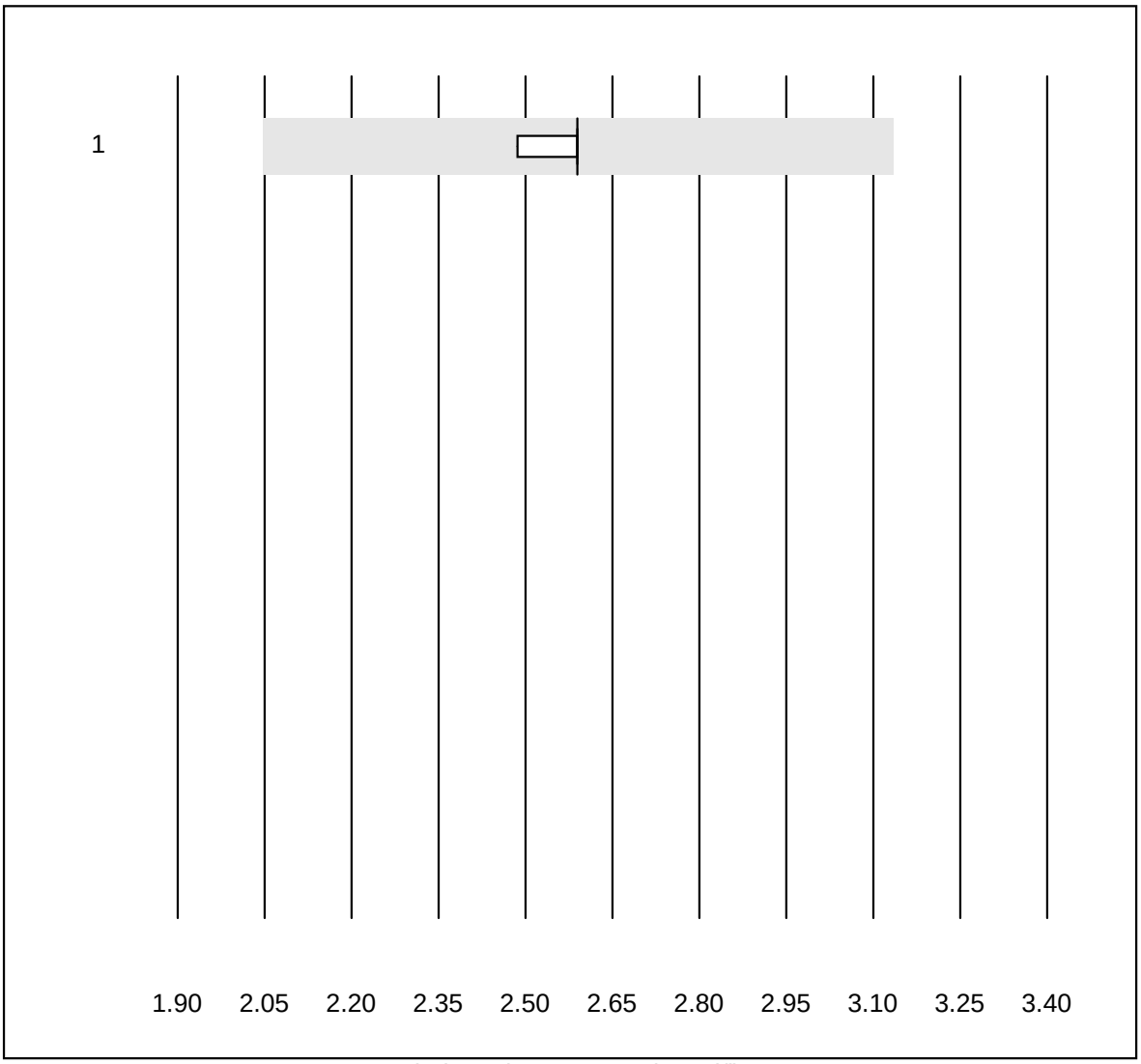


QUALAB tolerance : 10 %

Cholesterin PTS (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CardioChek	5	60.0	40.0	0.0	5.6	7.2	e*

Cholesterin HDL PTS

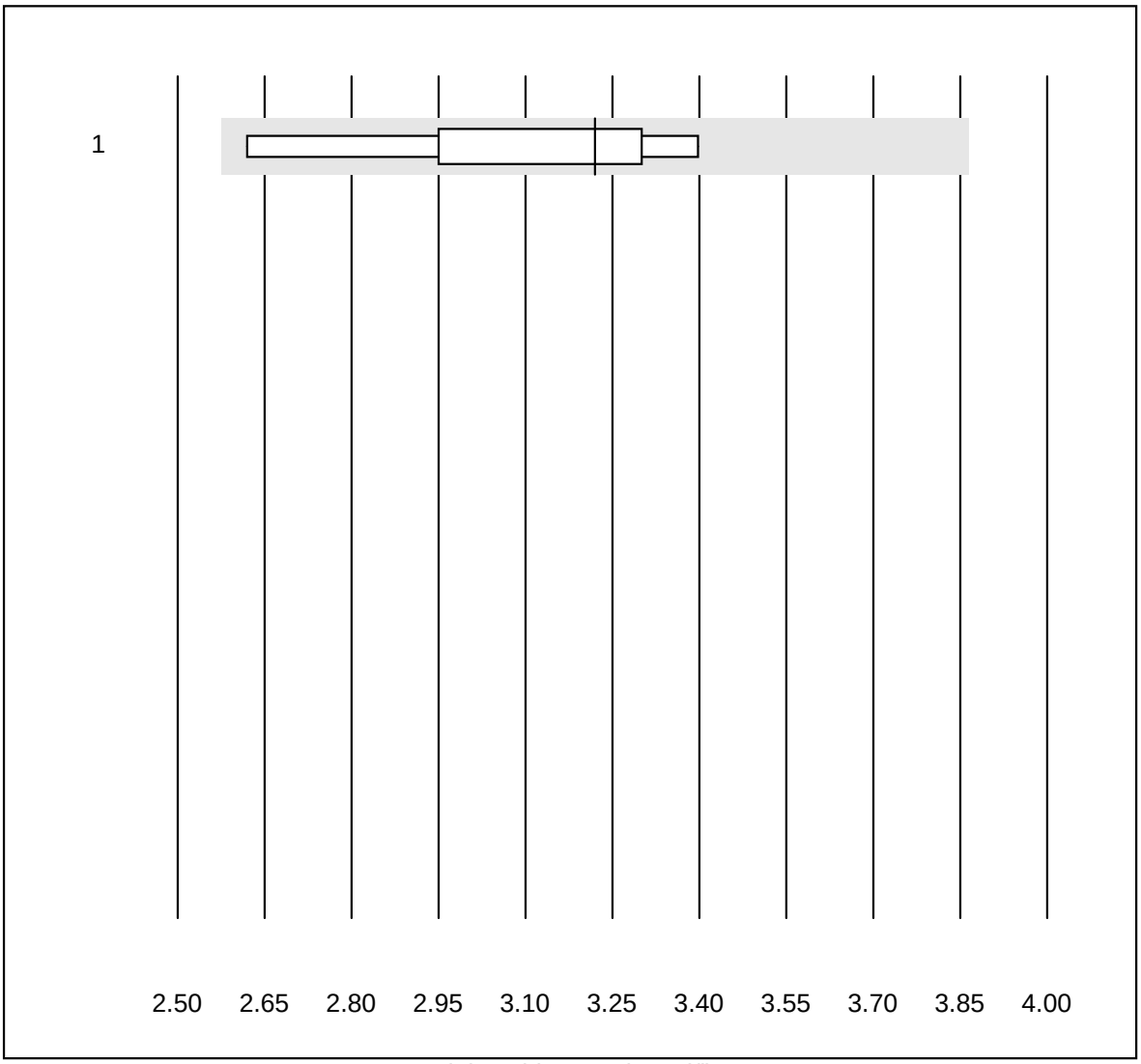


QUALAB tolerance : 21 %

Cholesterin HDL PTS (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CardioChek	5	100.0	0.0	0.0	2.6	1.8	e

Triglyceride PTS

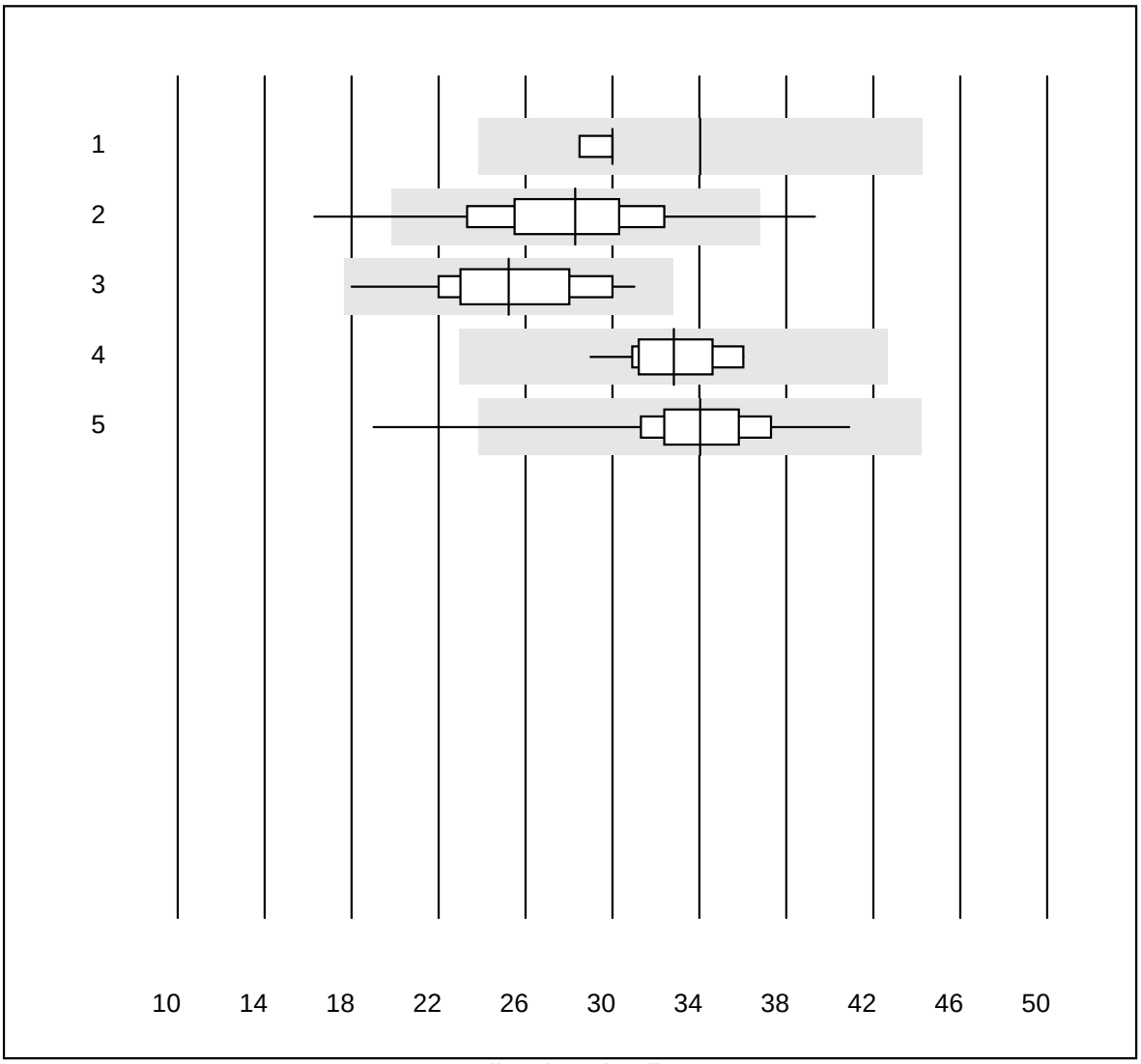


QUALAB tolerance : 20 %

Triglyceride PTS (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CardioChek	5	100.0	0.0	0.0	3.22	10.2	e*

Albumin U

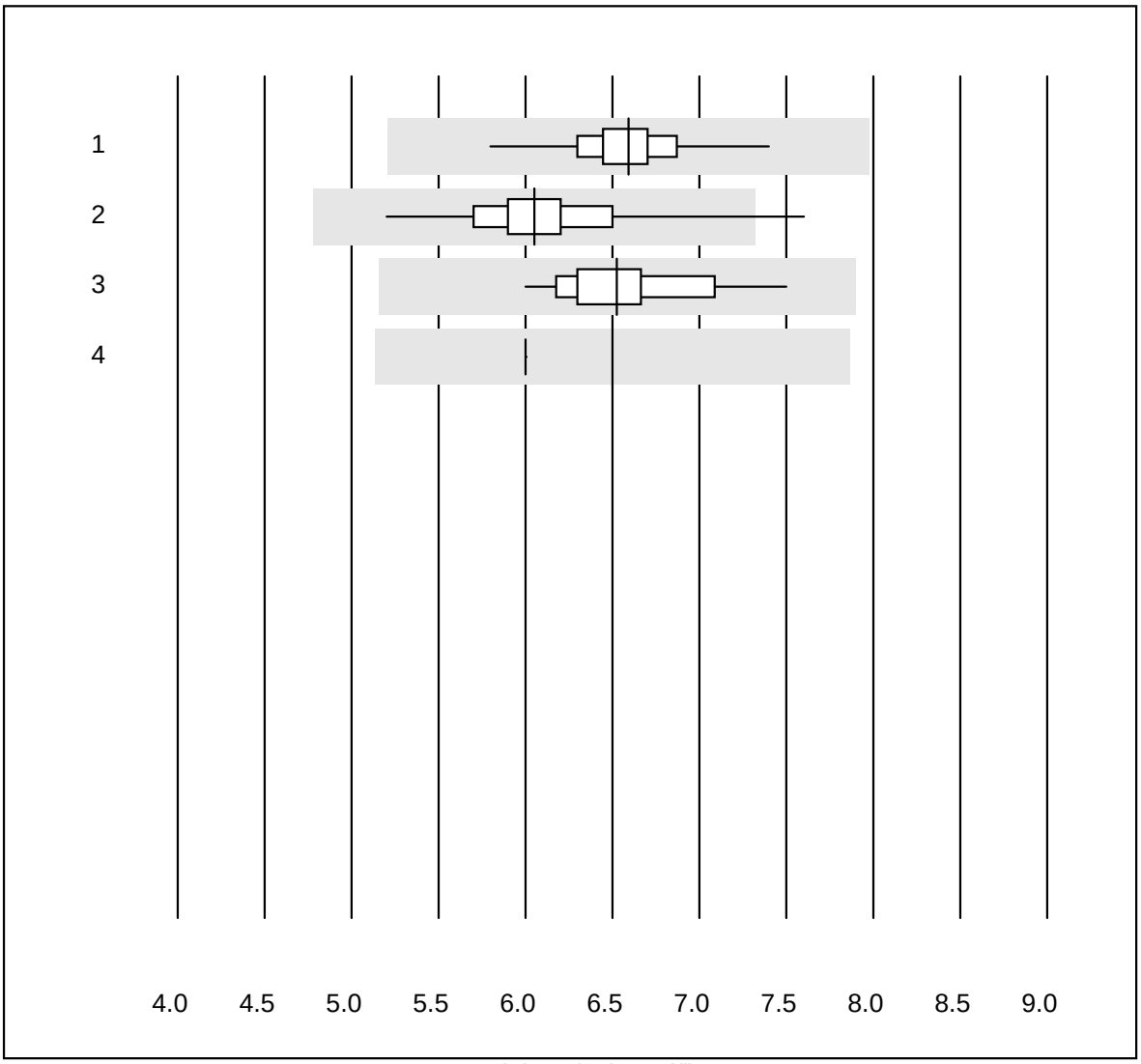


QUALAB tolerance : 30 %

Albumin U (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Siemens Clinitek	12	50.0	0.0	50.0	34.1	2.1	a
2	Afinion	305	95.8	2.6	1.6	28.3	13.4	e
3	NycoCard	20	85.0	0.0	15.0	25.2	12.8	a
4	Turbidimetry	13	100.0	0.0	0.0	32.8	6.5	e
5	DCA2000/Vantage	106	96.3	0.9	2.8	34.0	8.4	e

Kreatinin Urin

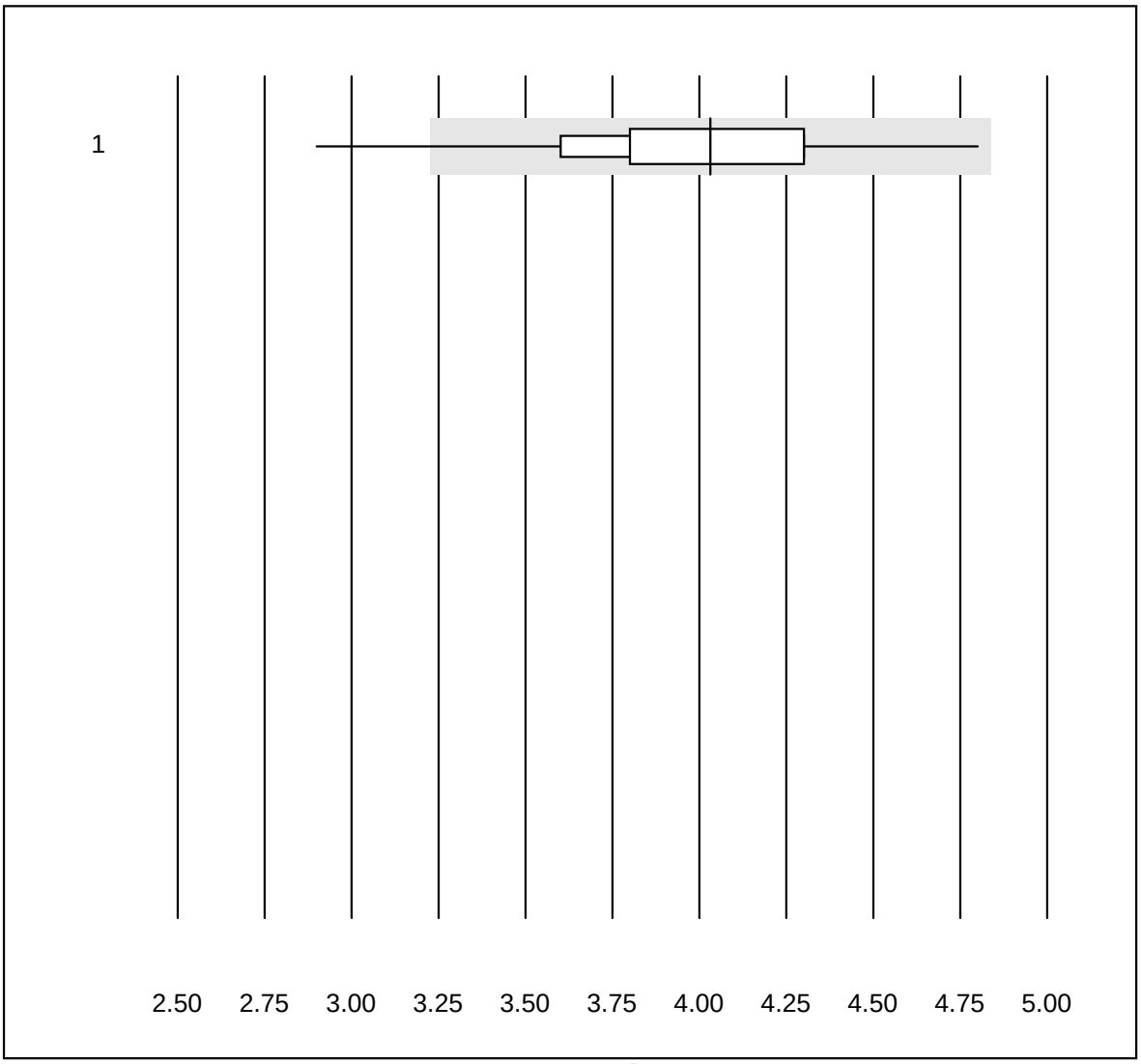


QUALAB tolerance : 21 %

Kreatinin Urin (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	DCA2000/Vantage	106	97.2	0.0	2.8	6.6	4.0	e
2	Afinion	305	99.0	0.3	0.7	6.1	5.5	e
3	Standard chemistry	23	100.0	0.0	0.0	6.5	5.5	e
4	Siemens Clinitek	10	10.0	0.0	90.0	6.5	0.0	a

INR CCXS

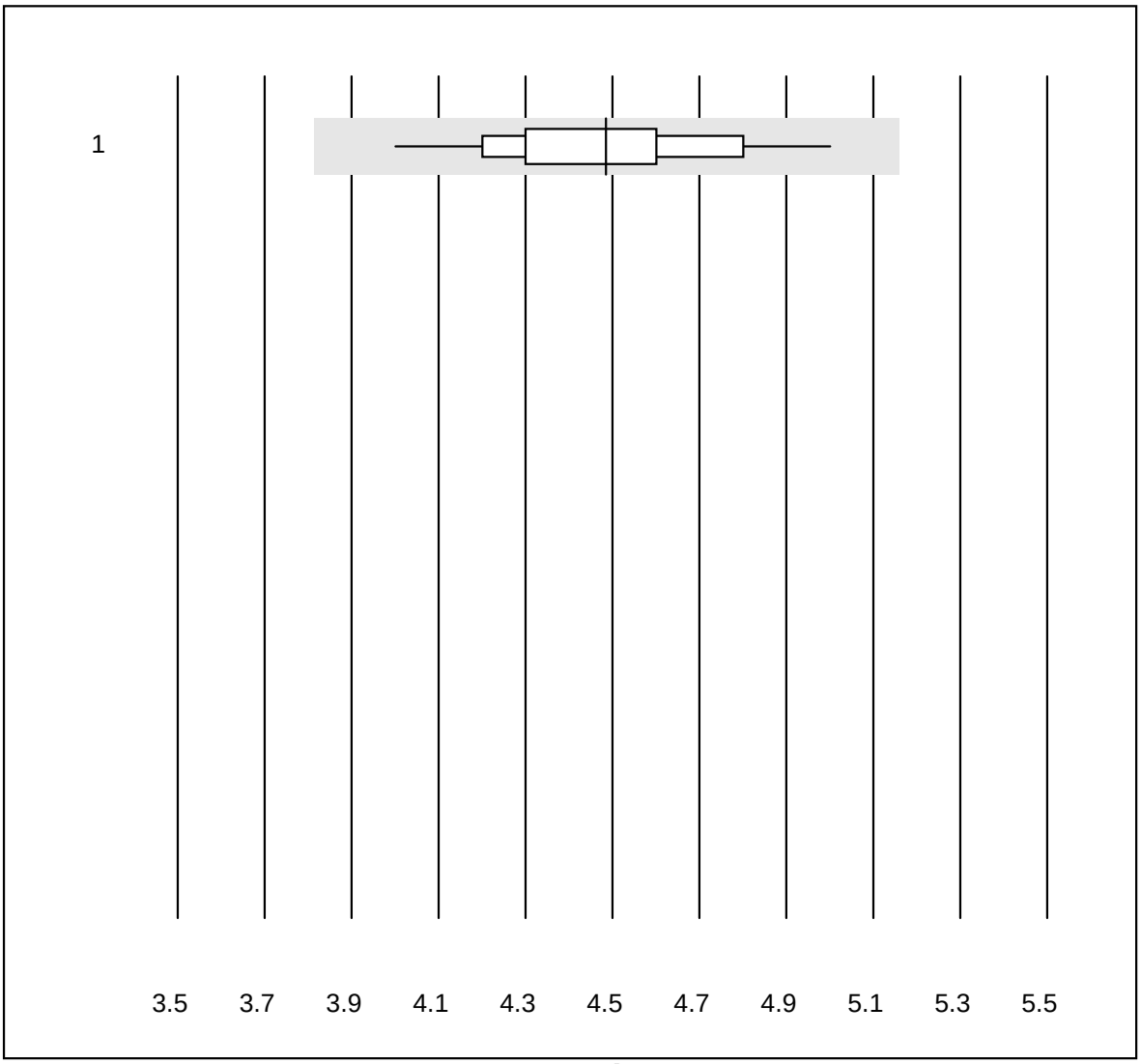


QUALAB tolerance : 15 %

INR CCXS ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	CoaguChek XS	2307	94.6	4.7	0.7	4.0	8.4	a

INR HC

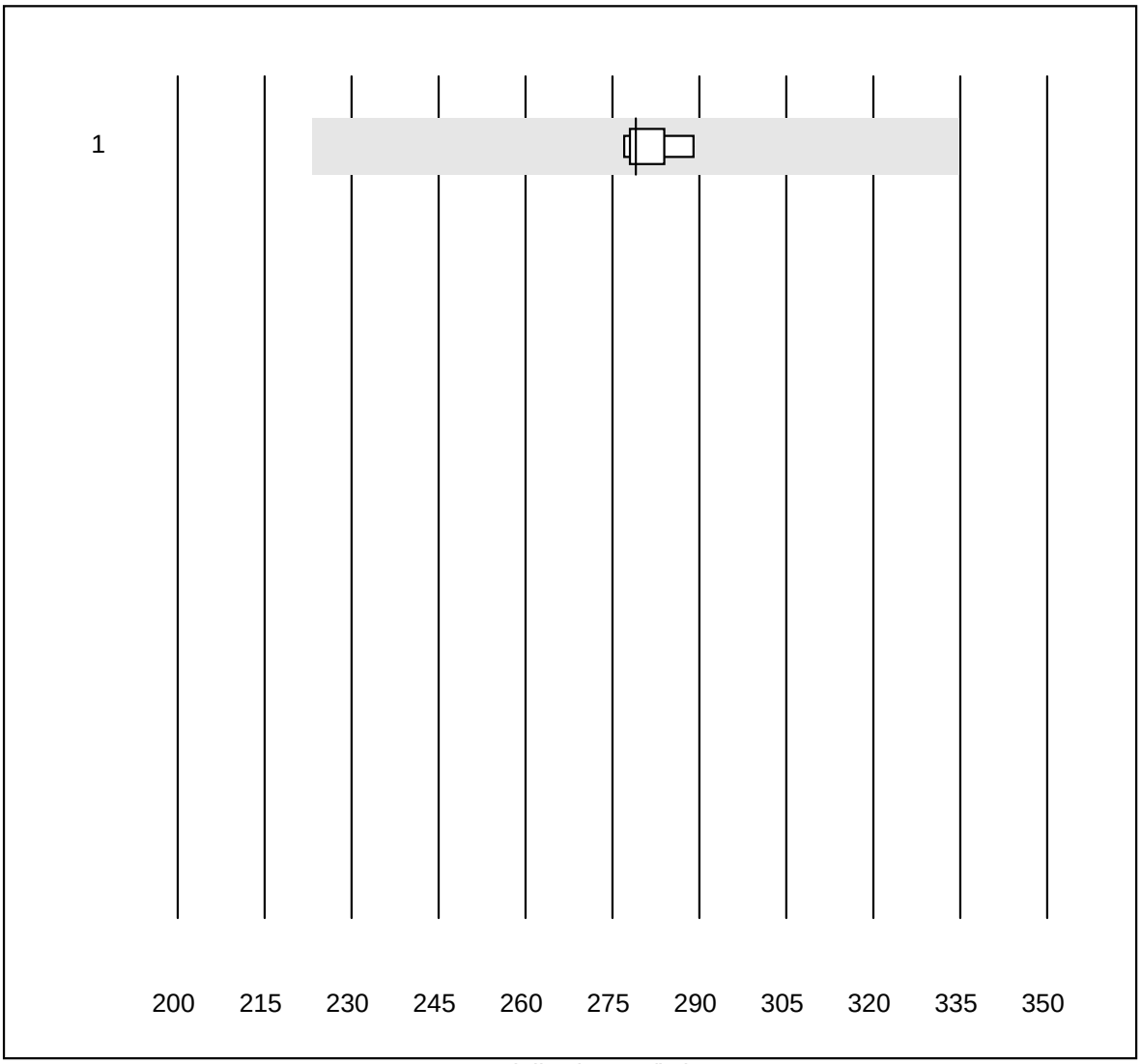


QUALAB tolerance : 15 %

INR HC ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Hemochron j.	24	91.7	0.0	8.3	4.5	5.9	e

Osmolality

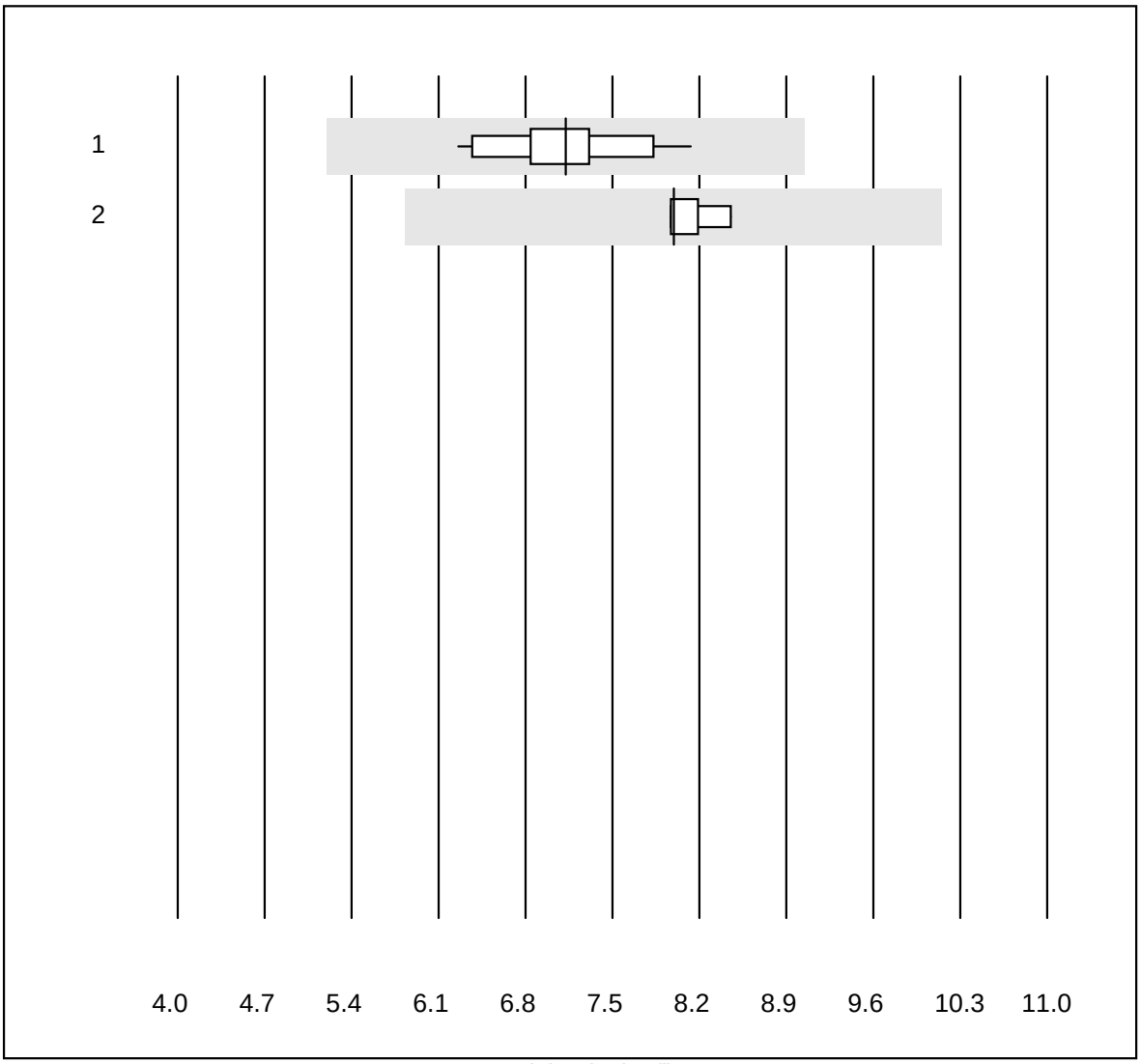


QUALAB tolerance : 20 %

Osmolality (mosm/kg)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cryoskopy	9	100.0	0.0	0.0	279	1.5	e

Procalcitonin

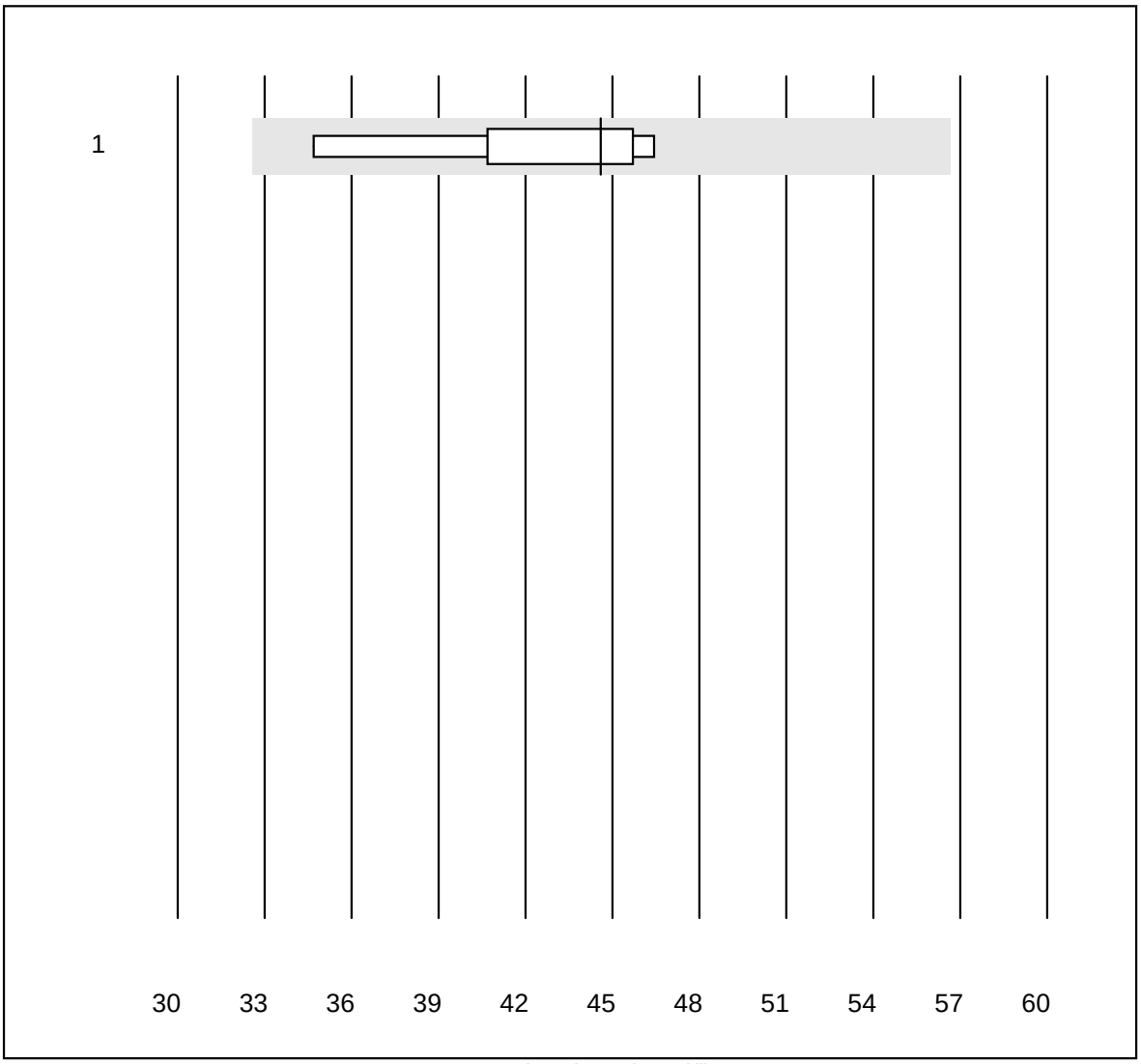


QUALAB tolerance : 27 %

Procalcitonin (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	13	100.0	0.0	0.0	7.12	7.9	e
2	Mini Vidas	6	100.0	0.0	0.0	8.00	2.4	e

25-OH Vitamin D

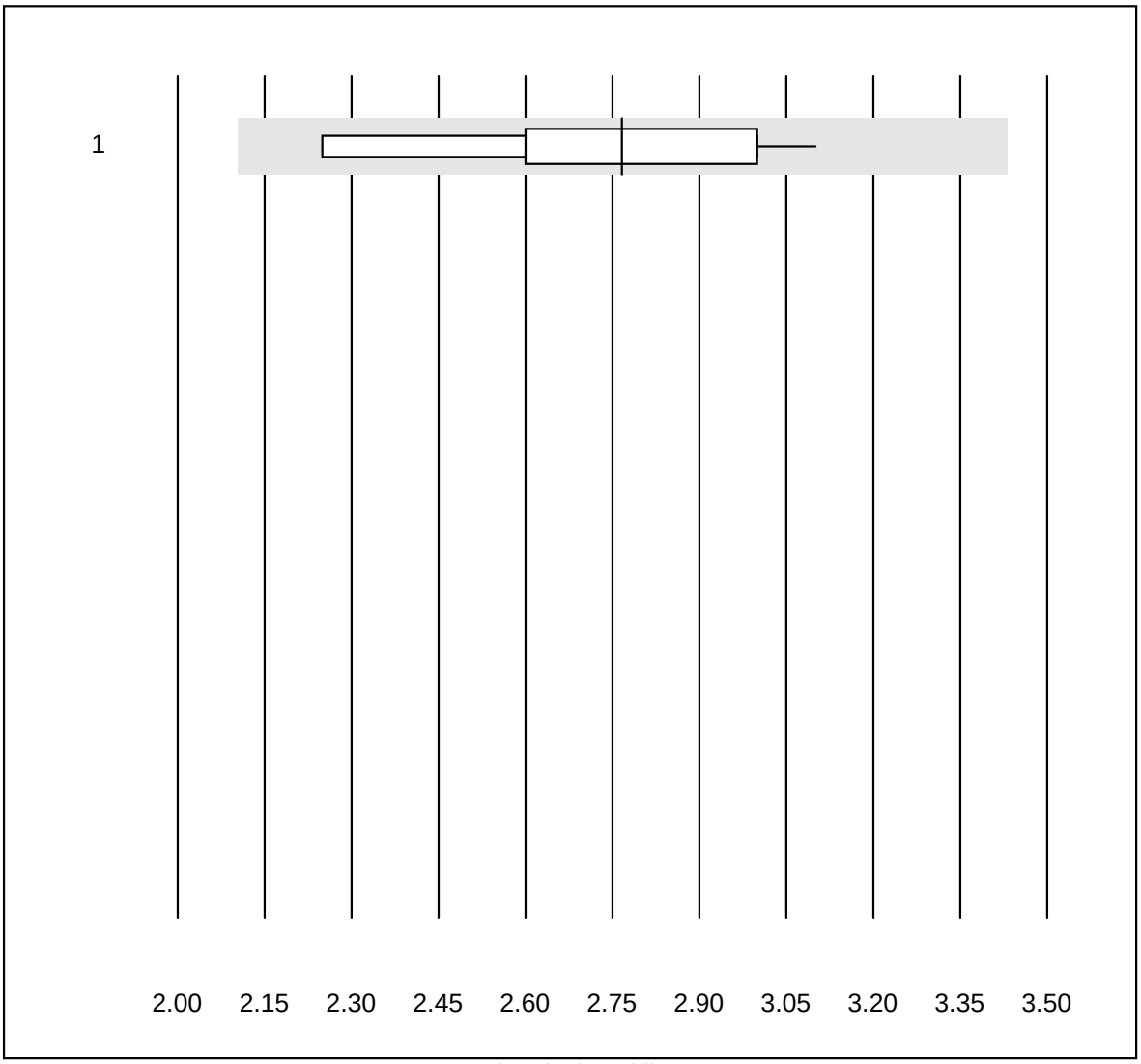


QUALAB tolerance : 27 %

25-OH Vitamin D (nmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas	6	100.0	0.0	0.0	44.6	10.4	e*

Digoxin

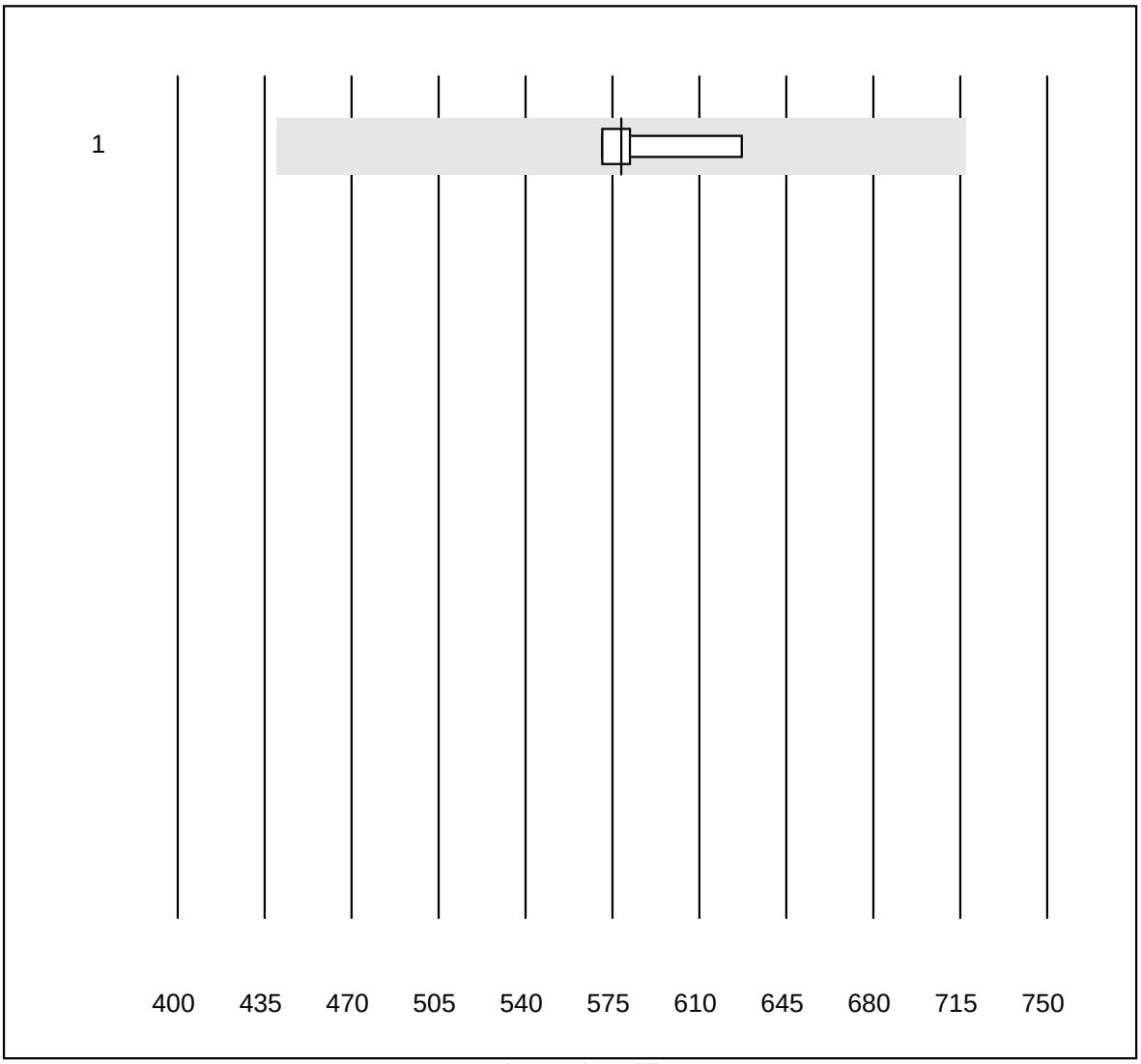


QUALAB tolerance : 24 %

Digoxin (nmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Other methods	10	100.0	0.0	0.0	2.77	10.1	e*

Valproat

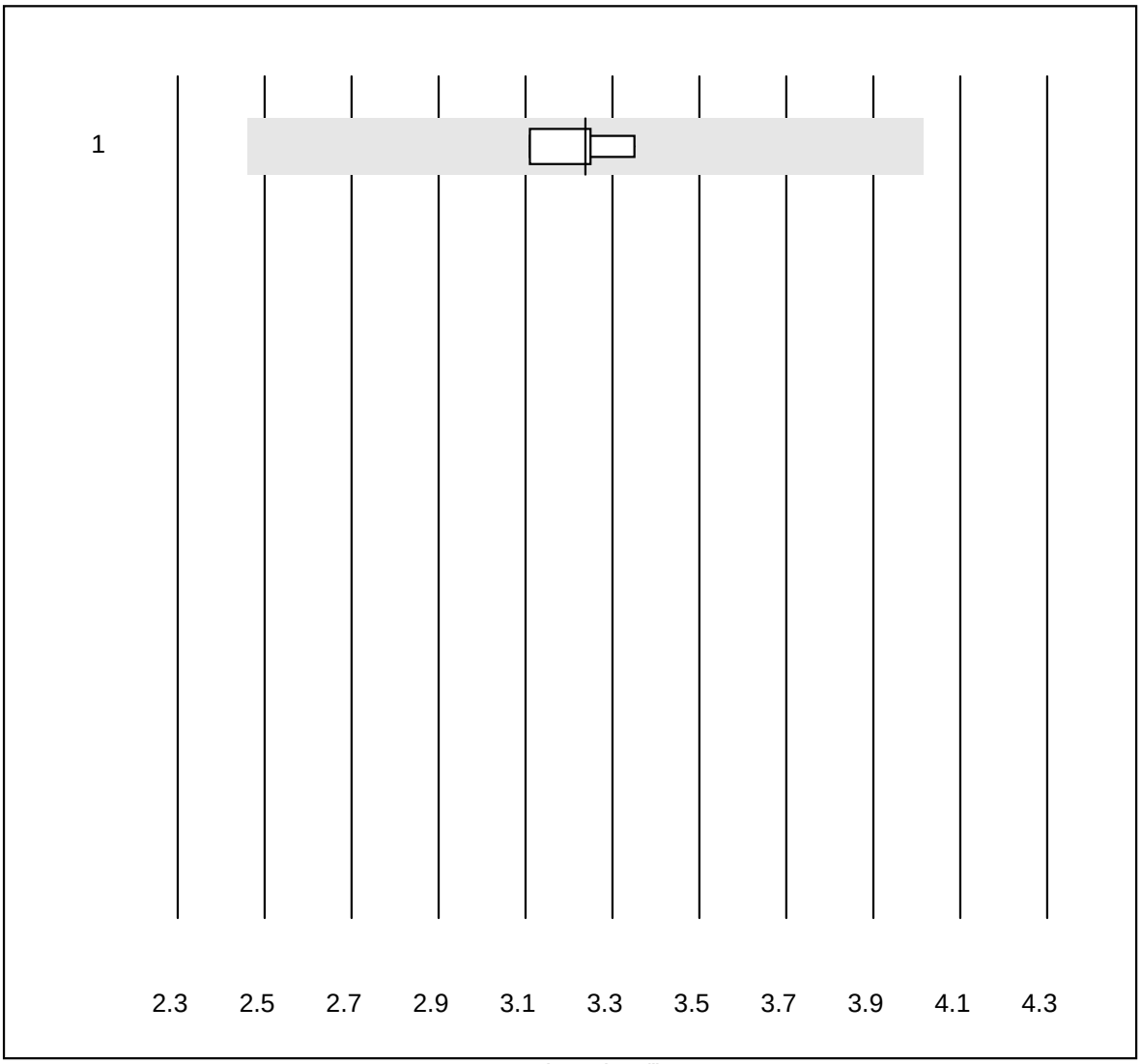


QUALAB tolerance : 24 %

Valproat (µmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	4	100.0	0.0	0.0	578.5	4.4	e

Cystatin C

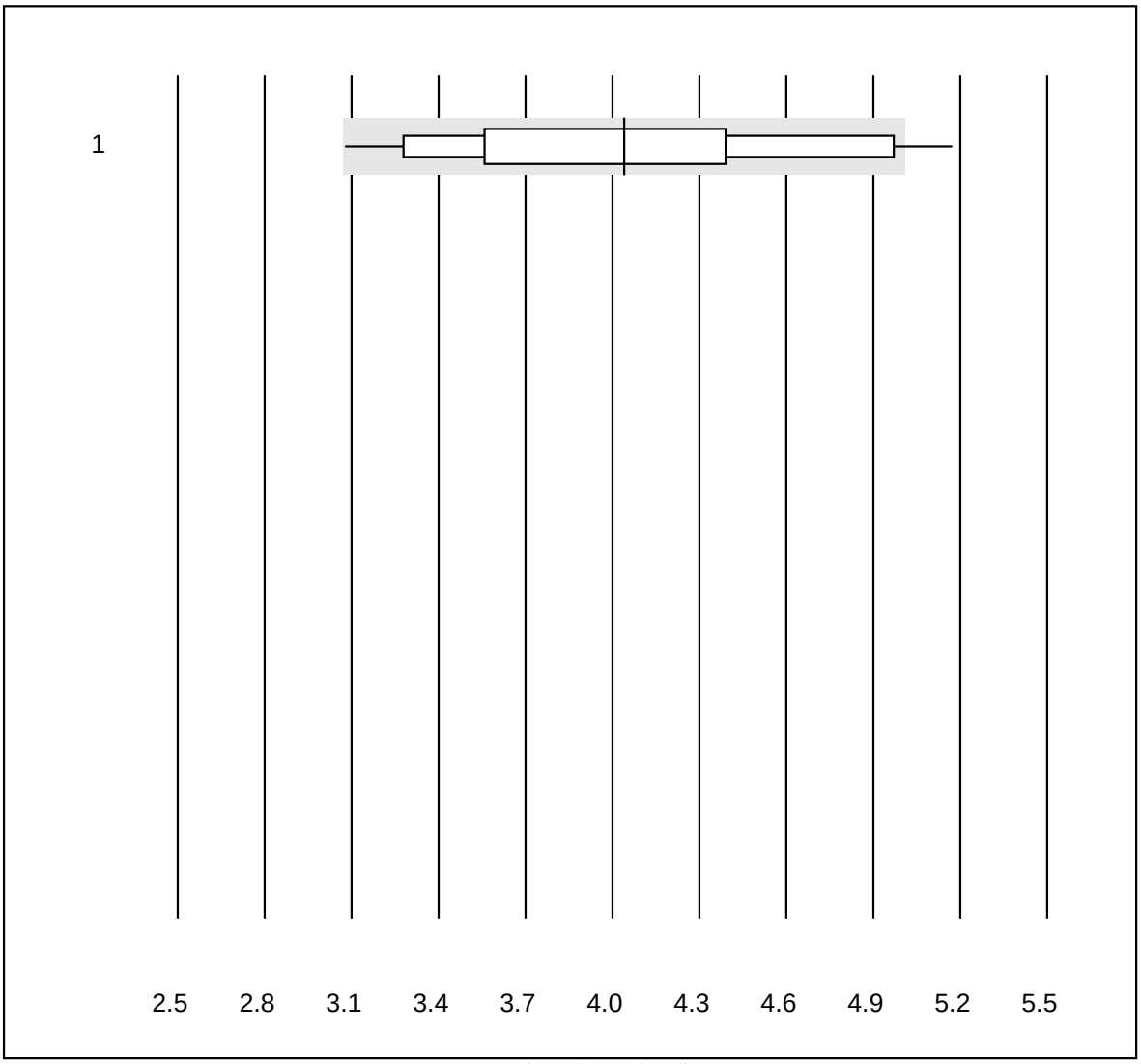


QUALAB tolerance : 24 %

Cystatin C (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	4	100.0	0.0	0.0	3.2	3.1	e

Troponin Triage

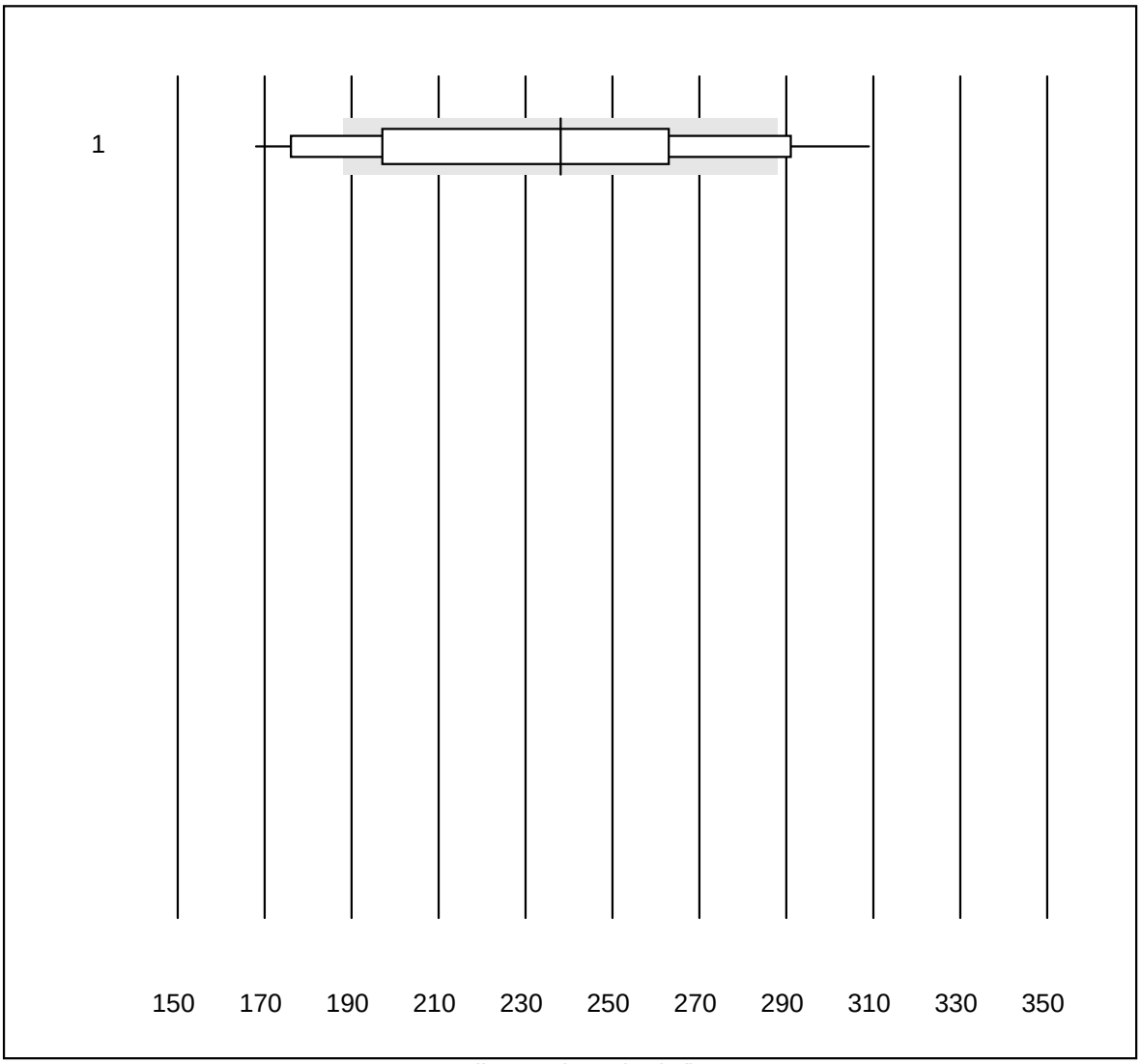


QUALAB tolerance : 24 %

Troponin Triage (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Triage Meter	33	75.7	6.1	18.2	4.04	14.9	e

D-dimer Triage

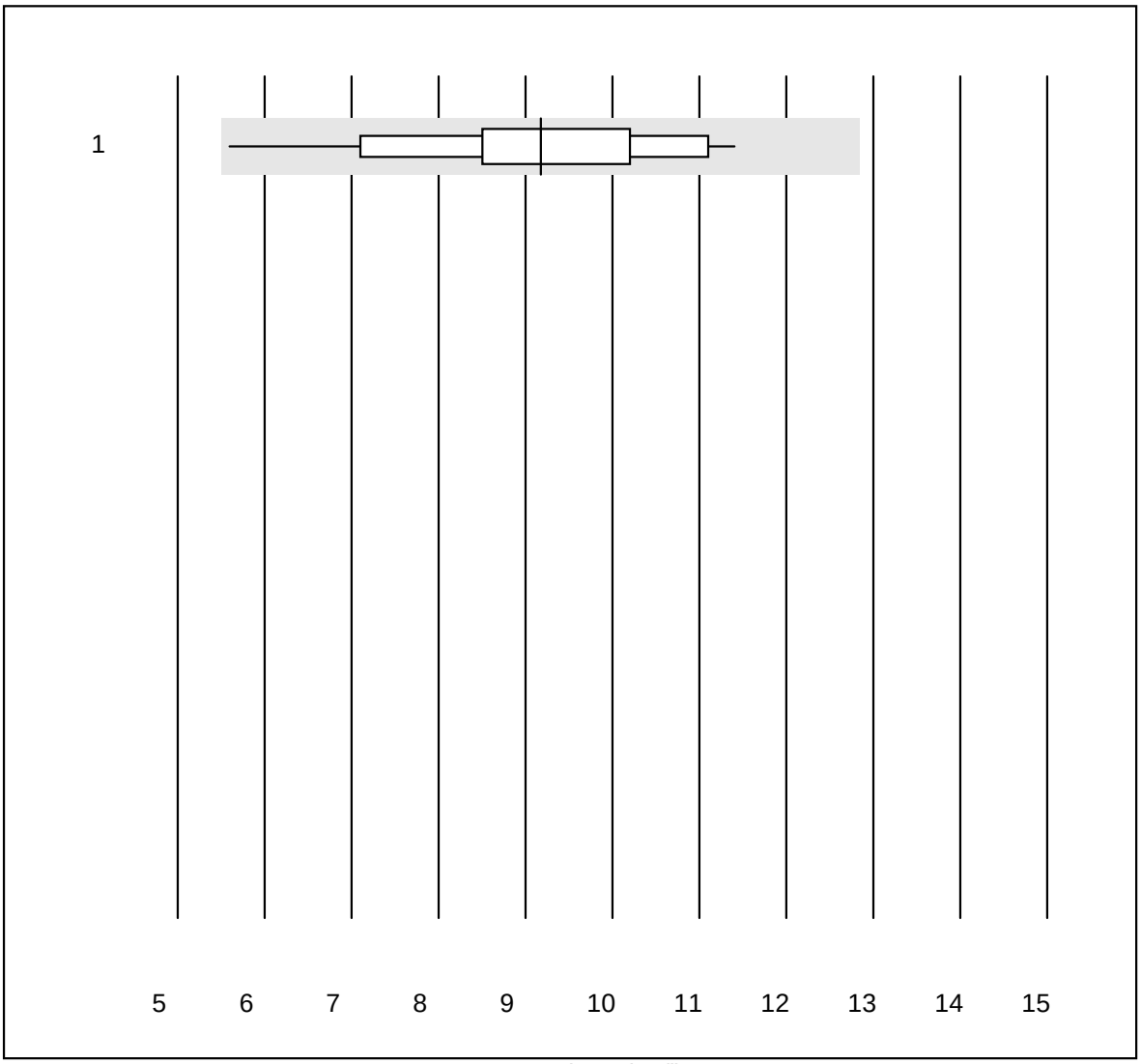


QUALAB tolerance : 21 %

D-dimer Triage (ng/ml)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Triage Meter	33	63.6	21.2	15.2	238.00	17.4	e*

CK-MB Triage

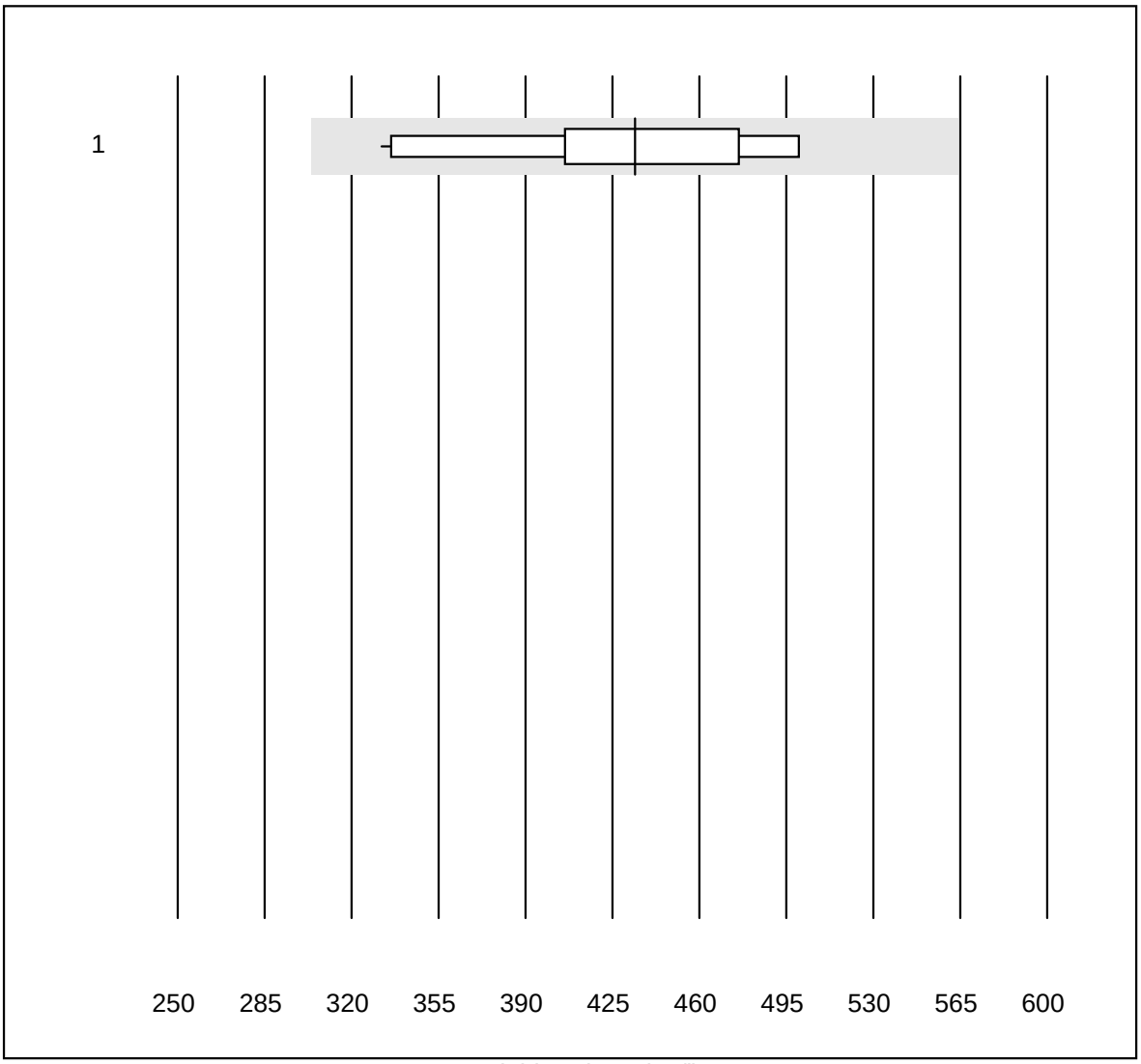


QUALAB tolerance : 40 %

CK-MB Triage (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Triage Meter	19	100.0	0.0	0.0	9.2	14.9	e

Myoglobin Triage

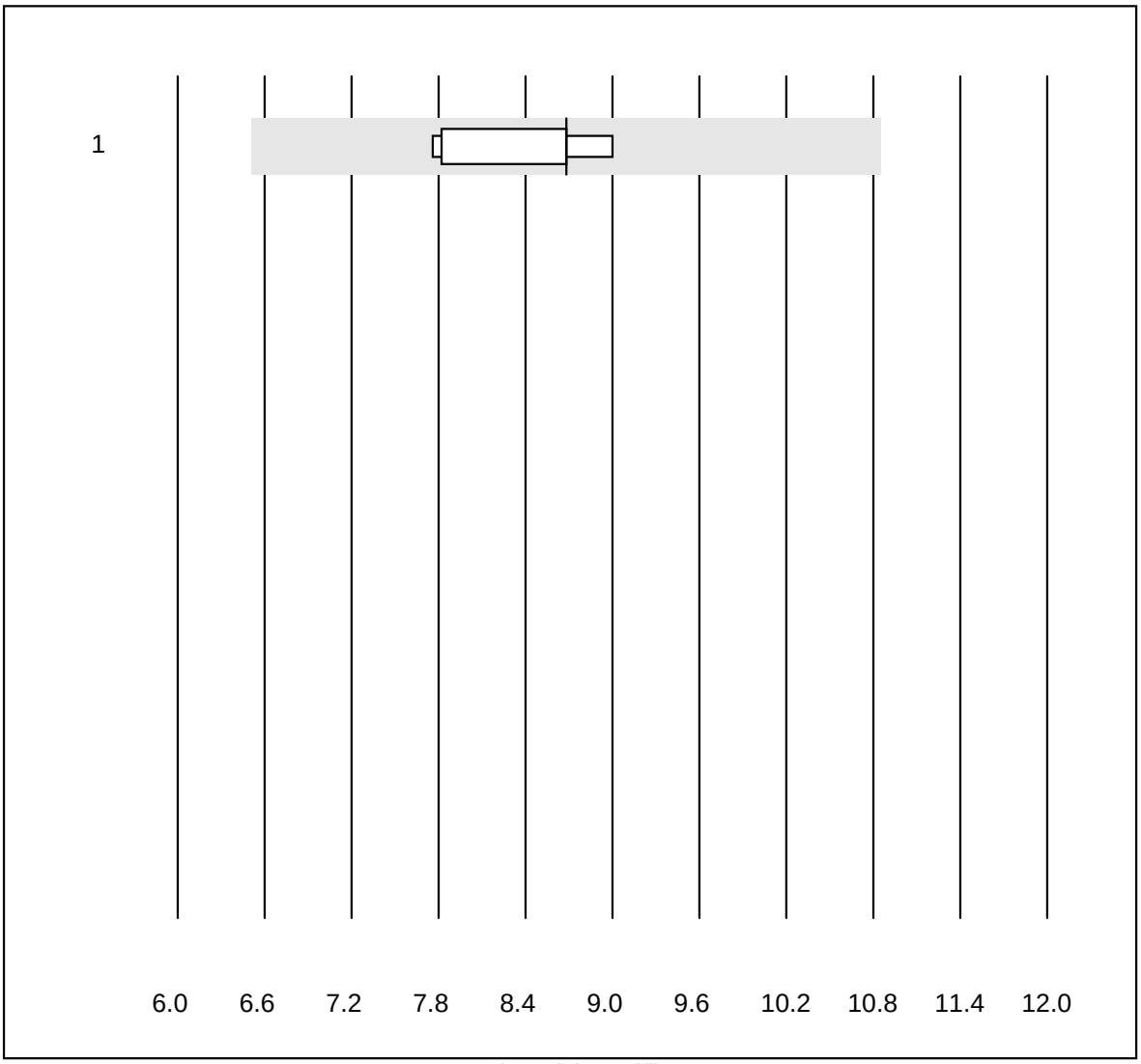


QUALAB tolerance : 30 %

Myoglobin Triage (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Triage Meter	17	100.0	0.0	0.0	434.1	12.6	e

Ethanol

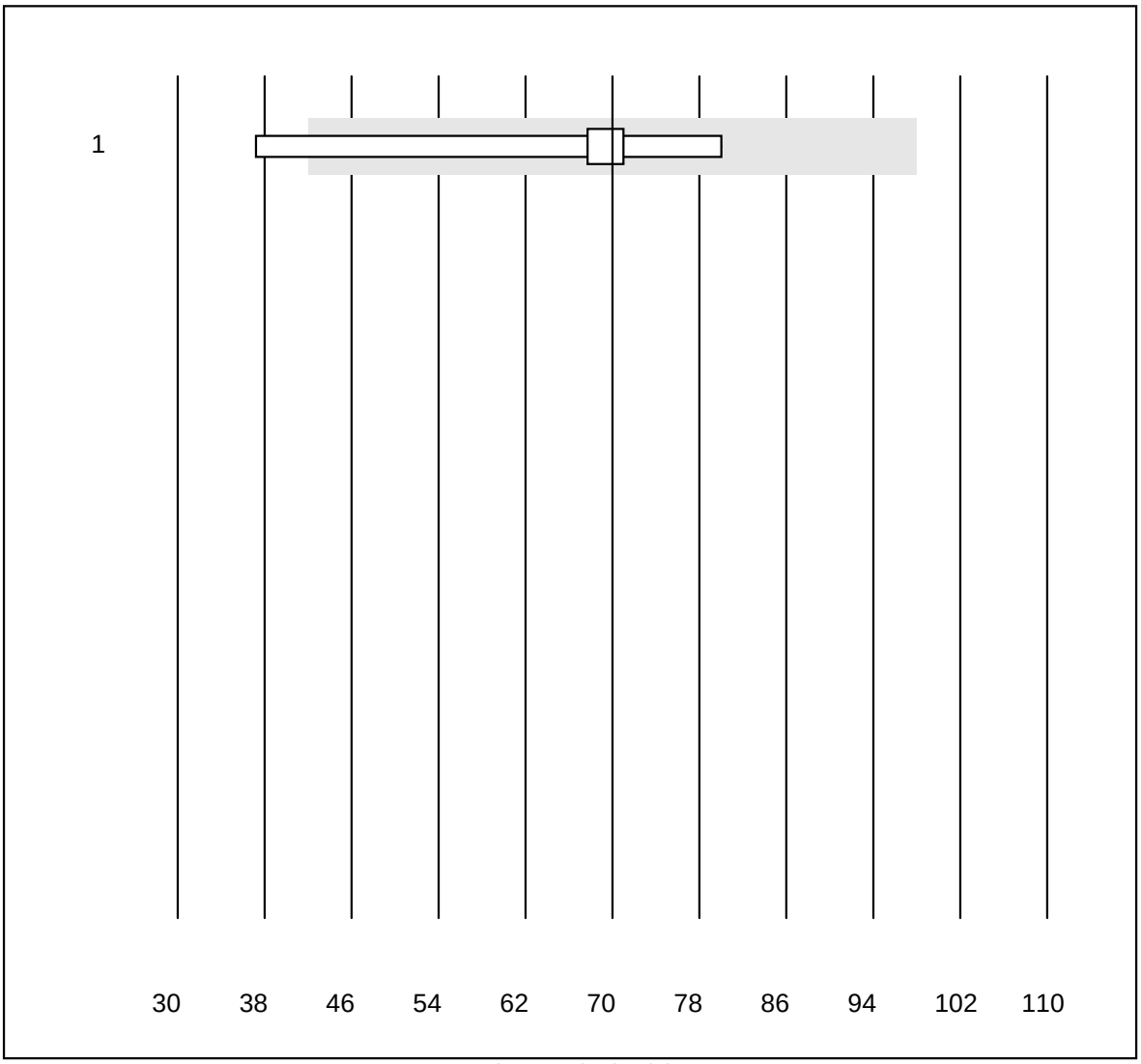


QUALAB tolerance : 25 %

Ethanol (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	all Participants	5	100.0	0.0	0.0	8.7	6.7	e

Calprotectin

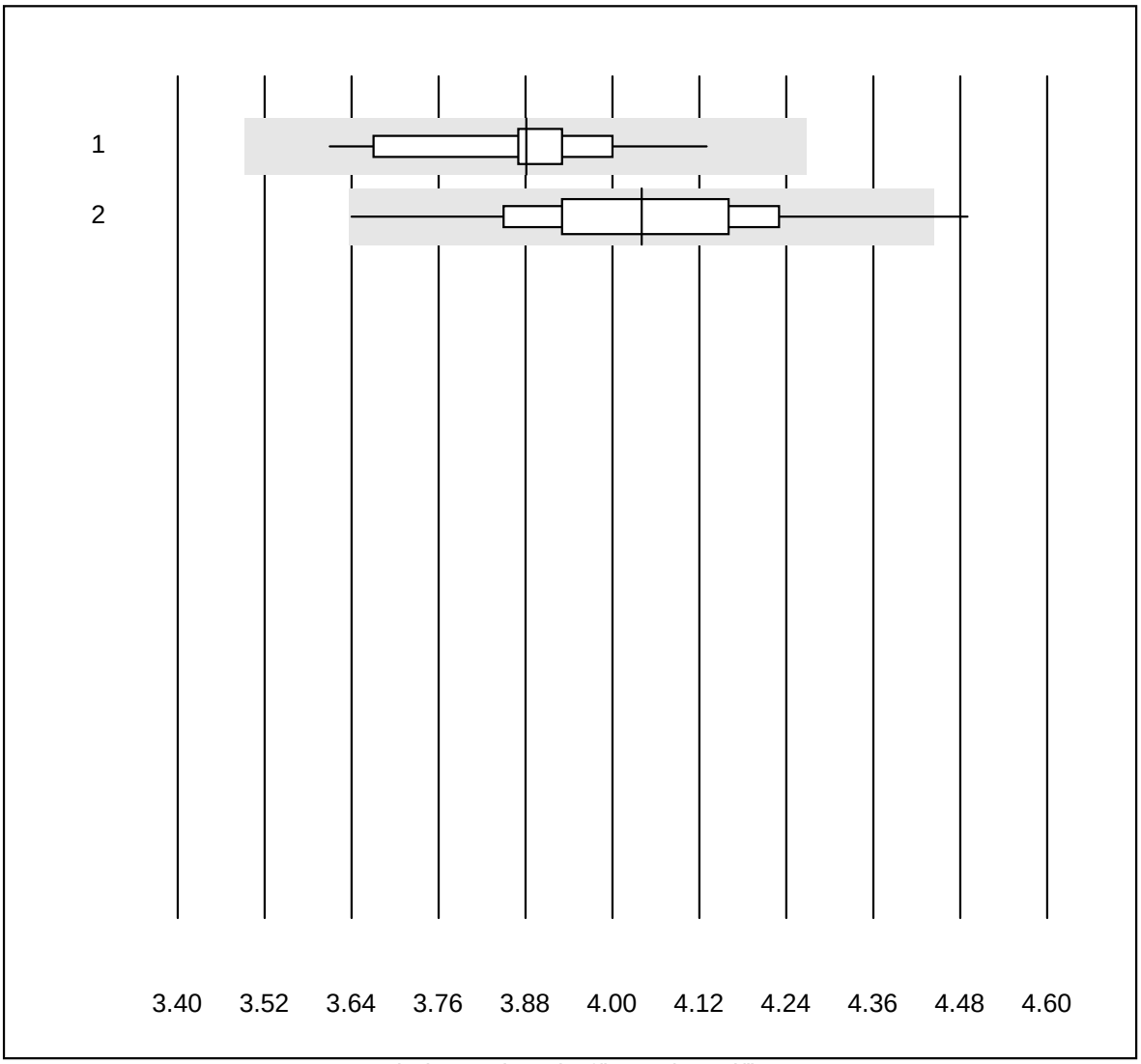


QUALAB tolerance : 40 %

Calprotectin (µg/g)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Bühlmann	7	85.7	14.3	0.0	70	20.3	e*

Cholesterol total Af/b101

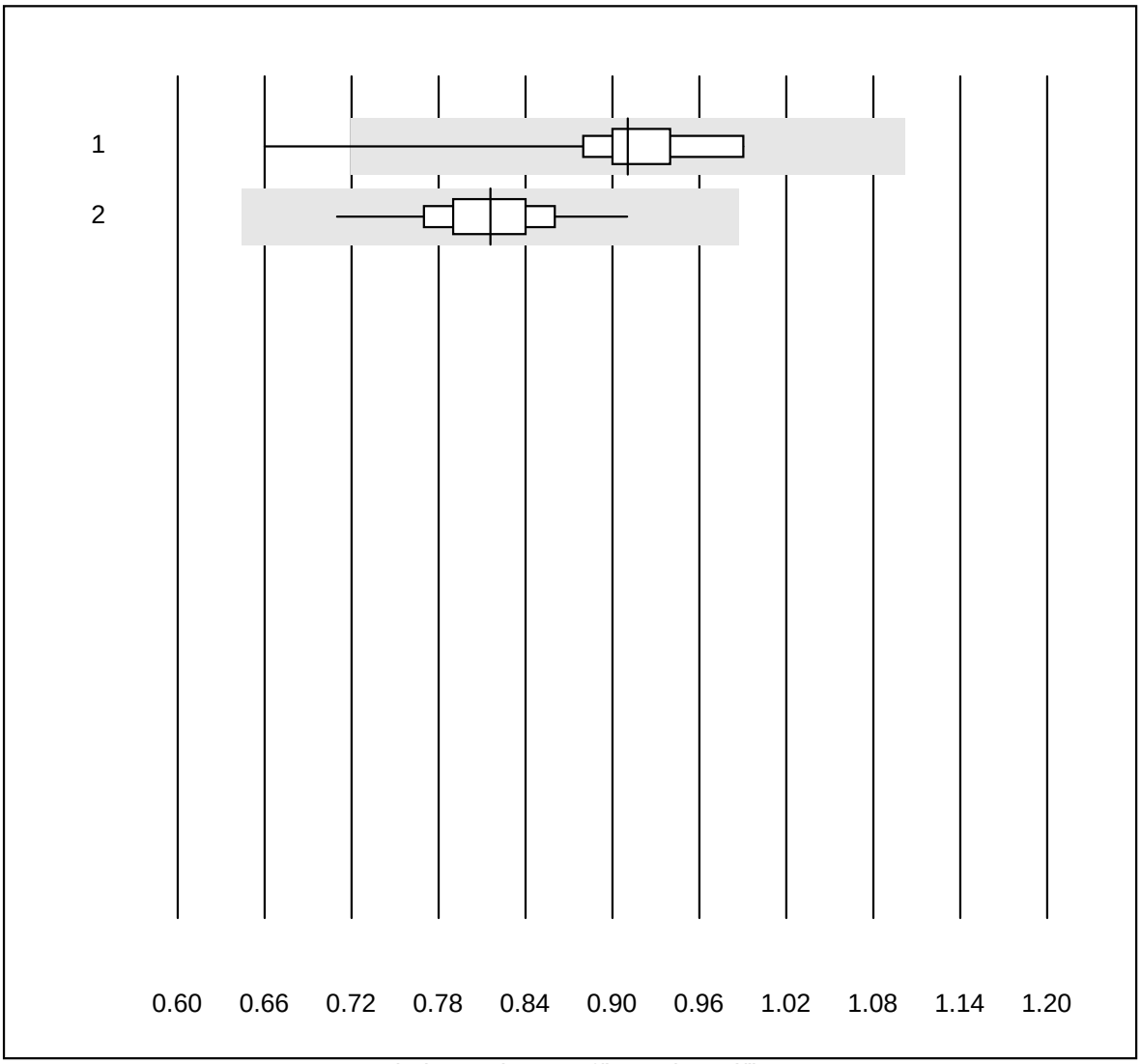


QUALAB tolerance : 10 %

Cholesterol total Af/b101 (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b101	17	100.0	0.0	0.0	3.9	3.1	e
2	Afinion	212	99.5	0.5	0.0	4.0	3.7	e

Cholesterol HDL Af/b101

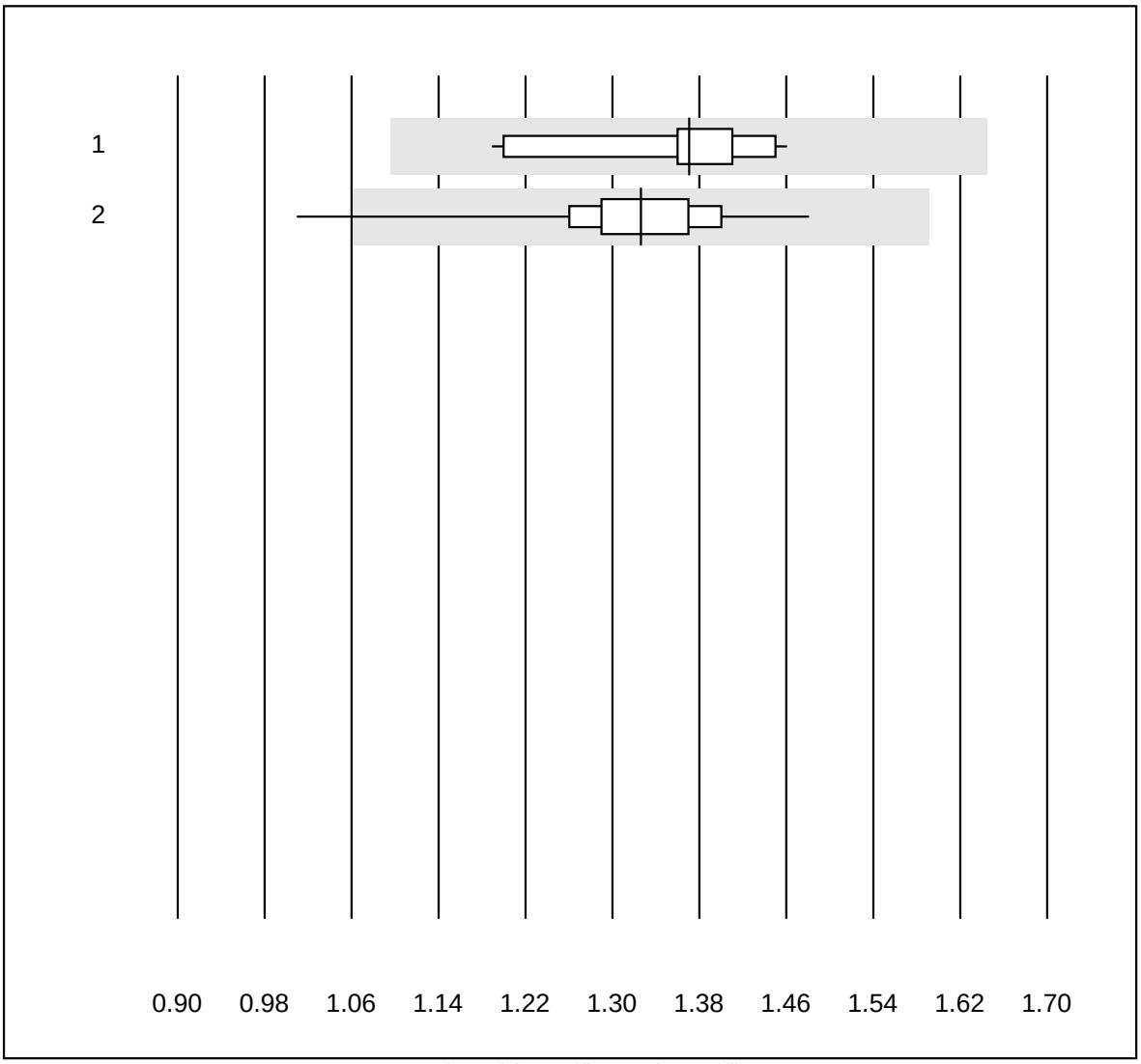


QUALAB tolerance : 21 %

Cholesterol HDL Af/b101 (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b101	17	82.3	5.9	11.8	0.9	8.4	e
2	Afinion	213	93.0	0.0	7.0	0.8	4.5	e

Tryglycerides Af/b101

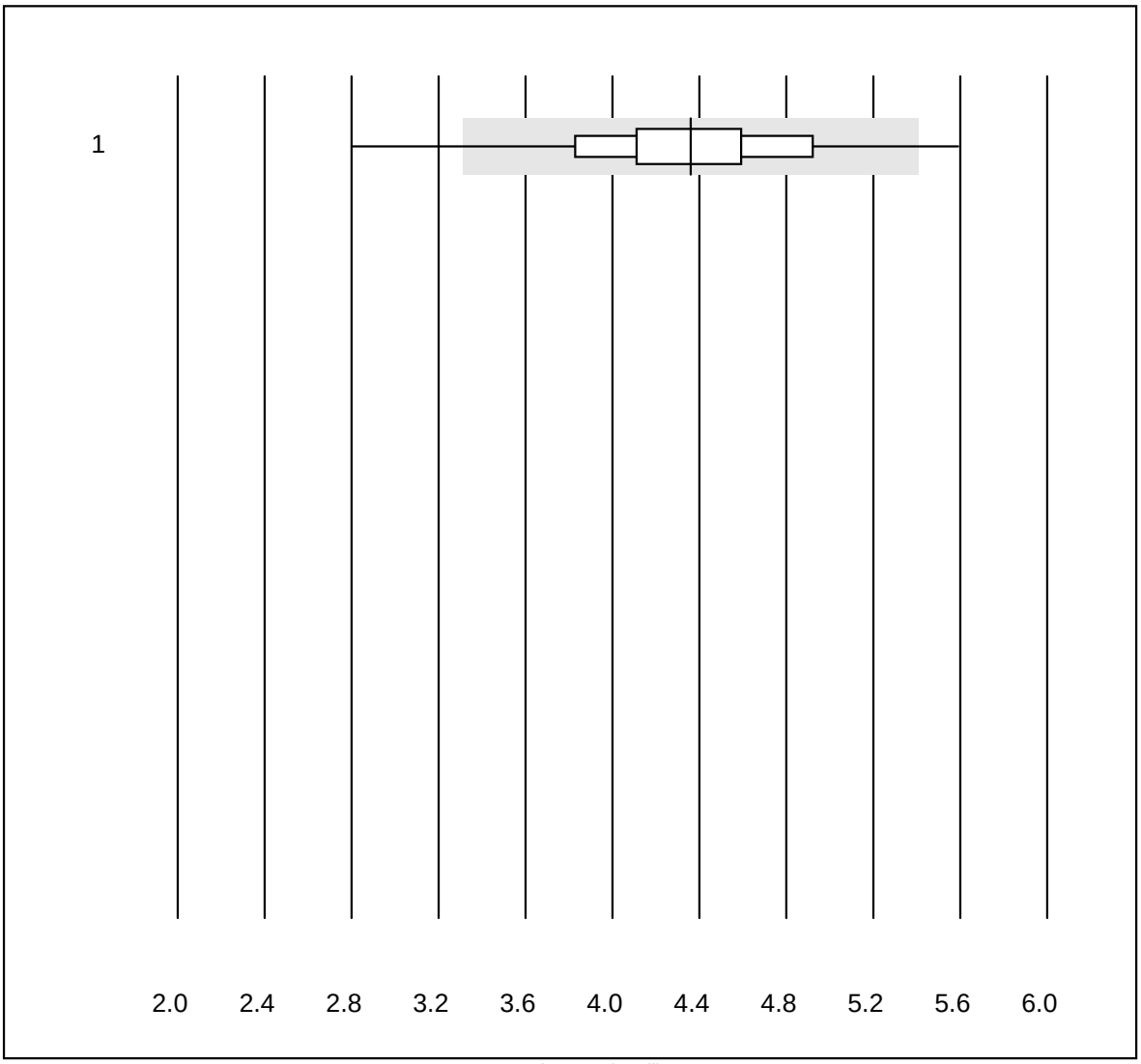


QUALAB tolerance : 20 %

Tryglycerides Af/b101 (mmol/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Cobas b101	18	100.0	0.0	0.0	1.37	5.2	e
2	Afinion	211	99.1	0.9	0.0	1.33	4.9	e

Tropnin I S

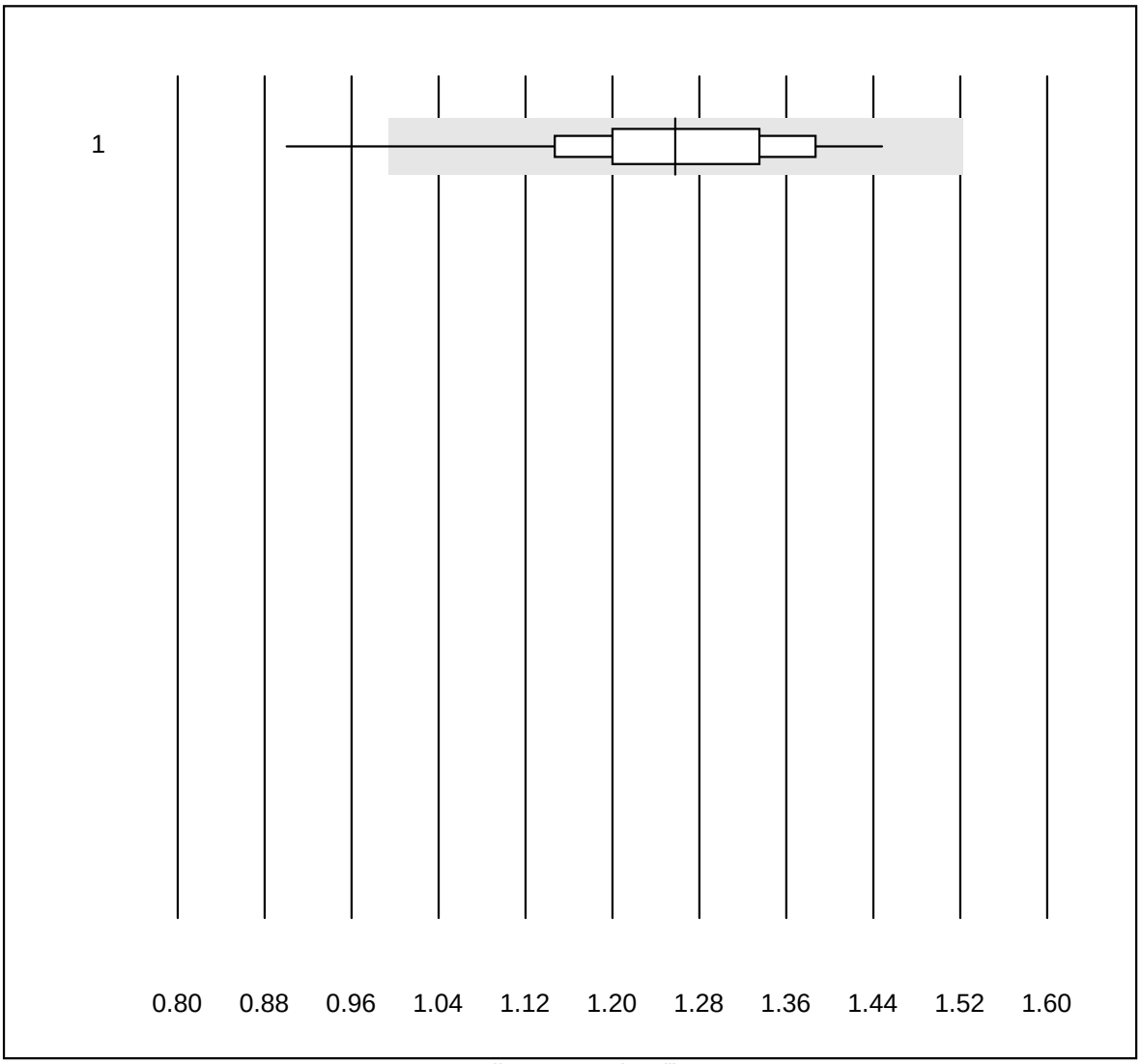


QUALAB tolerance : 24 %

Tropnin I S (µg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Samsung LABGEO IB10	63	93.6	4.8	1.6	4.36	11.1	e

D-dimer qn S

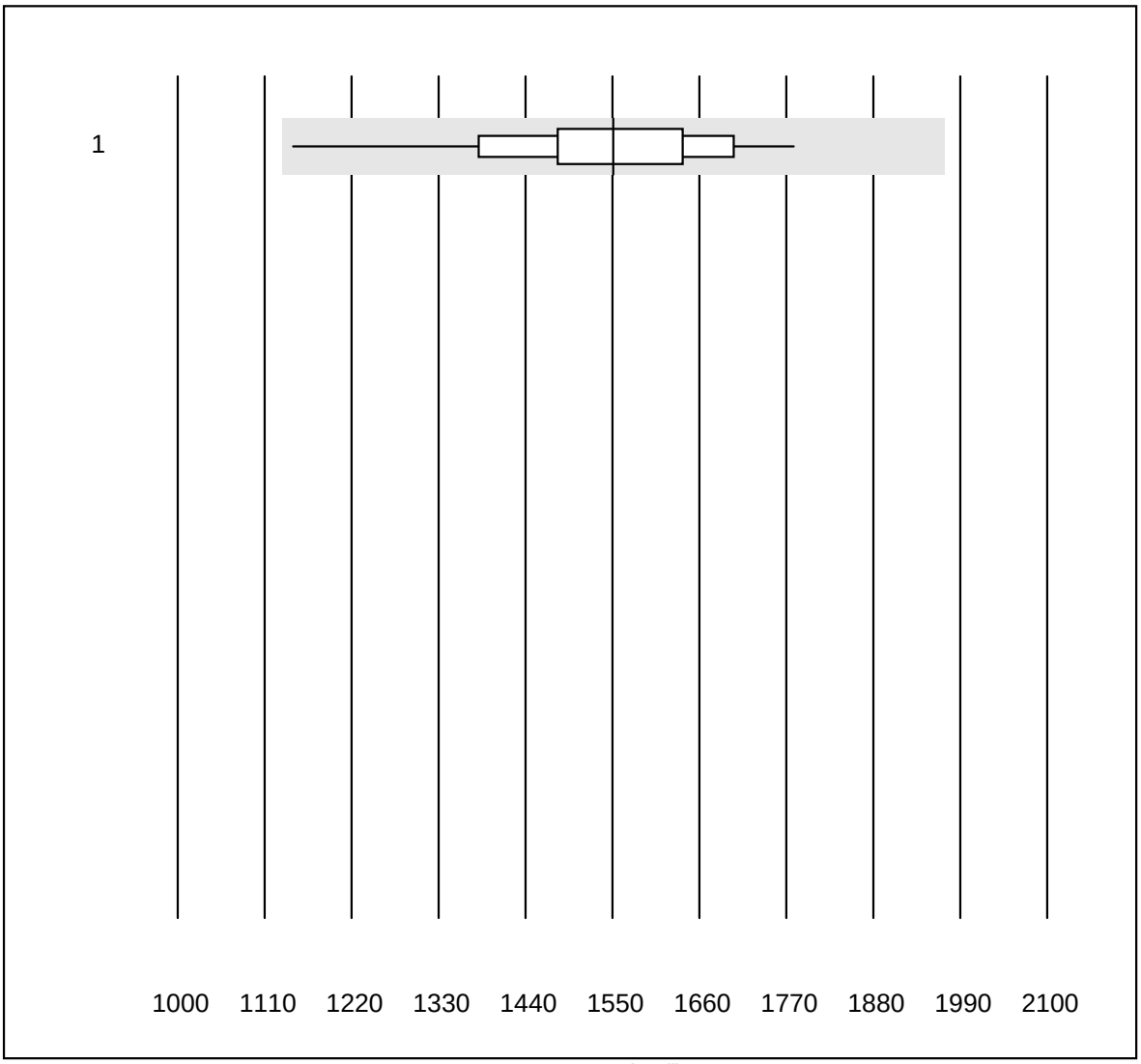


QUALAB tolerance : 21 %

D-dimer qn S (mg/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Samsung LABGEO IB10	76	93.5	2.6	3.9	1.26	8.3	e

NT-pro BNP S

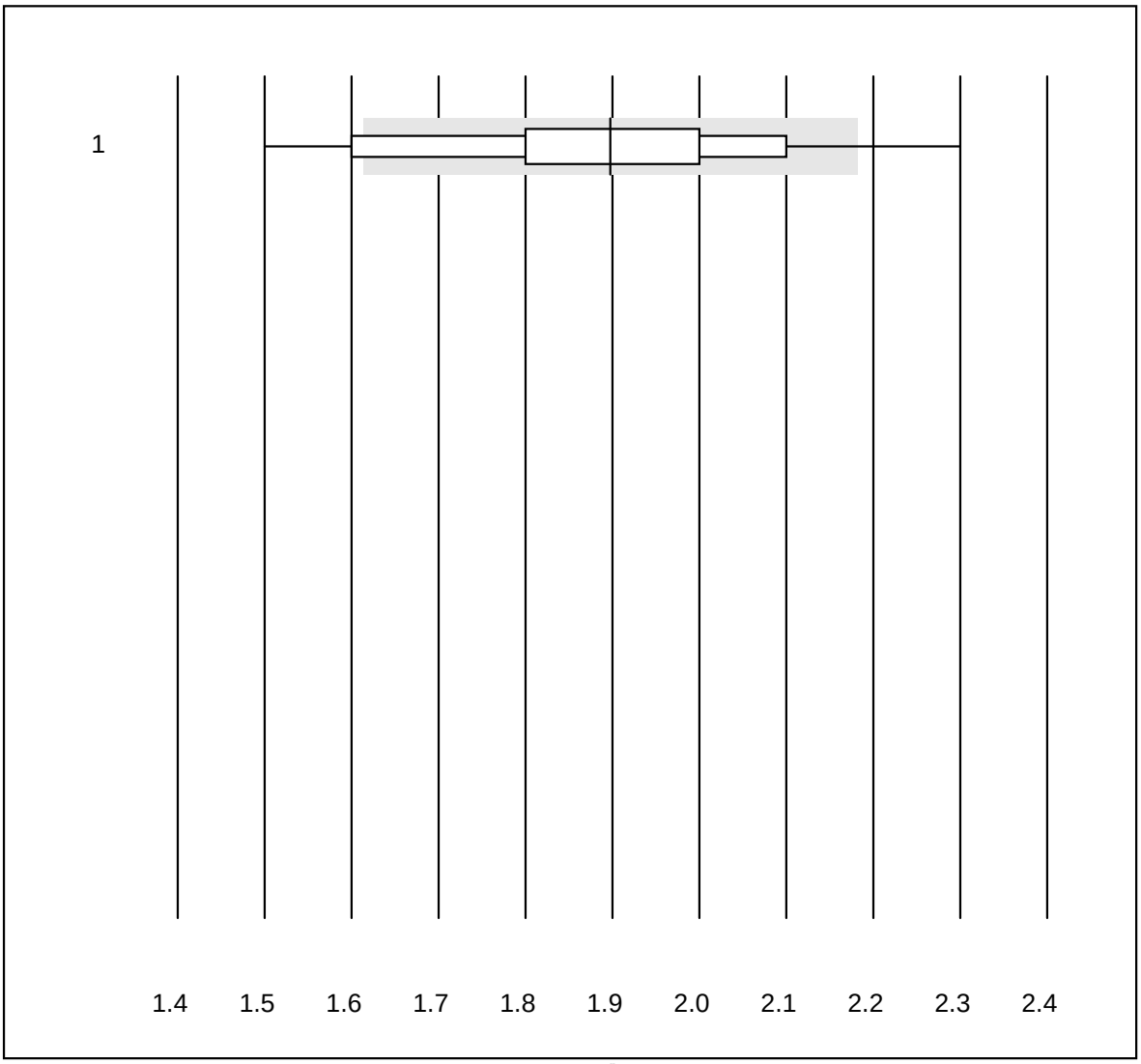


QUALAB tolerance : 27 %

NT-pro BNP S (ng/l)

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Samsung LABGEO IB10	51	94.1	0.0	5.9	1550.8	8.6	e

INR MI

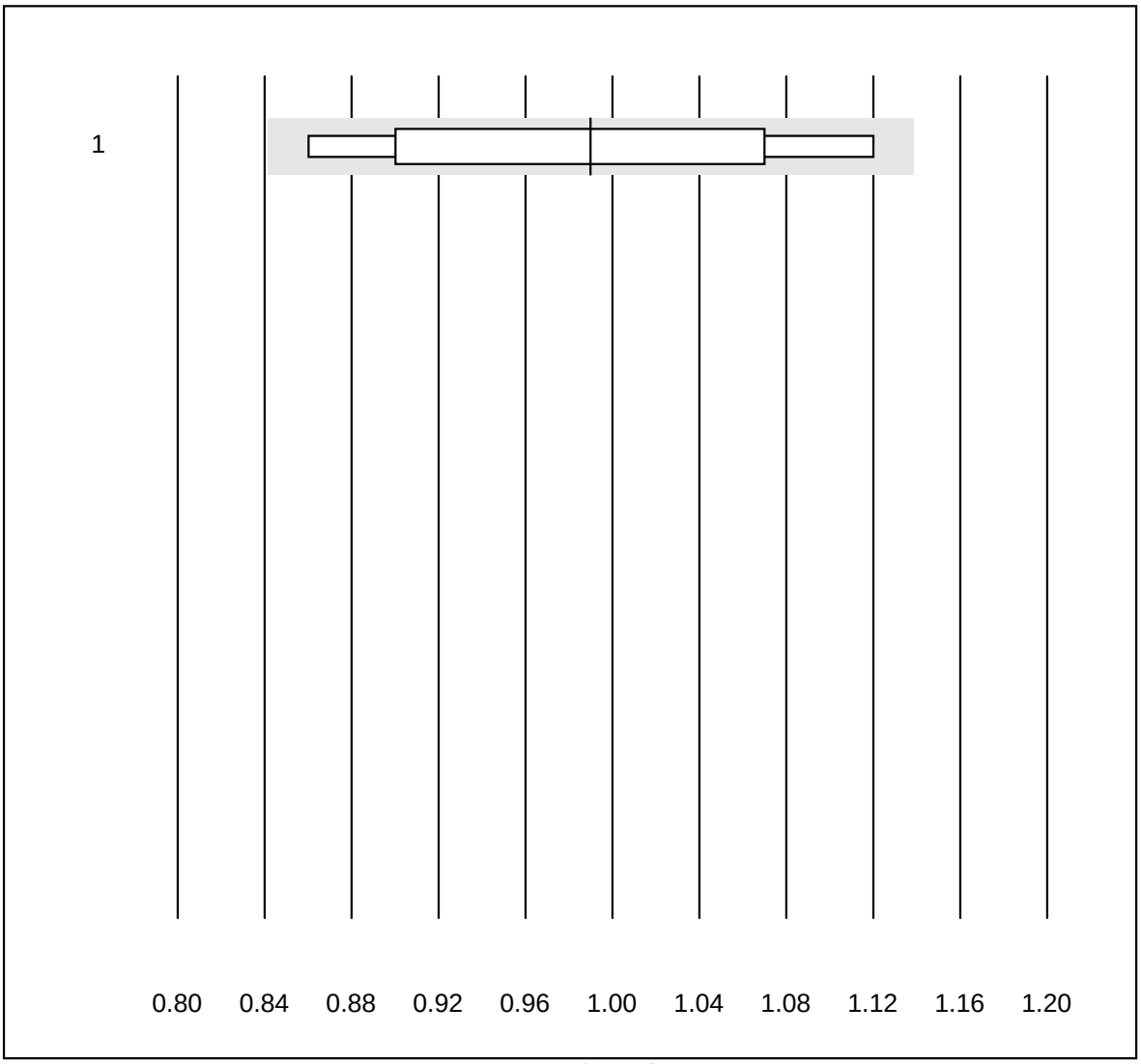


QUALAB tolerance : 15 %

INR MI ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	microINR	52	73.0	13.5	13.5	1.9	9.2	e

INR Eurolyser



QUALAB tolerance : 15 %

INR Eurolyser ()

No.	Methode	Total	% good	% insuff.	% outlier	target value	CV%	Typ
1	Eurolyser	7	100.0	0.0	0.0	1.0	9.4	e*