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This report contains:

- This letter
- Summary
- Individual results

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HIL-index and interference, program no. 4131 EQA report no. 2 2023

The quality assurance program HIL-index and interference examines both preanalytical, analytical and postanalytical conditions.

Preanalytical conditions: determination of haemolysis (H), icterus (I) og lipemia (L) called the HIL-index in the distributed samples.

Is the determination of the HIL-index comparable among the groups of instruments?

Analytical: comparison of the analysis results of 6 components between a 'normal' sample without the interference (Sample A) and a sample with added interference (Sample B). In this distribution the interference caused by icterus is examined.

Postanalytical: sharing of the comments accompanying a result to the relevant department, had this been a patient sample with inference outside of the allowable level.

The number of participants

Results from 107 sample sets have been reported in this round.

Control material

The two samples A and B are from similar serum pools except sample B is added dissolved unconjugated bilirubin and Sample A is added the same amount of solvent without bilirubin.

Statistics

Target values and tolerance intervals

The target values in the graphics for the 'normal' components, H-index and L-index are the mean value of all the participants' analysis results for Sample A and this is indicated with M. Sample B's target value is the same as for Sample A and is indicated with R; any deviation from R is a measure of interference, if the deviation is larger than what is observed for Sample A.

For the I-index, both the target values for Sample A and Sample B are marked with R, and it is calculated as mean of means for all manufactures with more than 3 participants.

The background for the tolerance intervals and a guide to reading the report is found at deks.dk:

<https://deks.dk/en/products/information-about-the-danish-products/hil-index-3121-dk/>

Outliers

Outliers are defined as results lying further from the average of all the results than 3.2 SD (standard deviation). This time, 22 outliers are found; cholesterol: 2, creatinine: 4, Ferritin: 1, potassium: 4, LDH: 4, Phosphate: 1.

For the hemolytic index, 2 outliers are found, for the lipemic index, 1 outlier is found and at the icteric index, 3 outliers are found.



Overview of manufacturer and method groups

Manufacturer and method group results for all 'normal' components, the H-index, the I-index and the L-index are found at the pages "summary report" prior to the individual results in the report.

Results and comments

Preanalytical

Graphics

There are graphics for the lipemic index, for the haemolytic and for the icteric indexes. These can be seen in the graphic part with your individual results.

Unit conversions

Note: Results which are not entered in the primary unit for the hemolytic index, for the icteric index or for the lipaemic index are recalculated to enable the comparison. The primary unit for hemolytic index is g/L, for the icteric index it is $\mu\text{mol/L}$ and for the lipaemic index it is g/L

If unit conversion is performed, it will be noted below the histogram as either:

"Own result: 19 mg/dL = 0,19 g/L"

Stating that DEKS has made a recalculation from mg/dL to g/L,

or as:

*"Own result: 24 [*mg/dL] = 0,24 g/L"*

Meaning that DEKS has assumed that your entered unit is false, and it has been substituted with mg/dL followed by a recalculation to g/L.

For results given as an index value, the middle of the interval is chosen as the converted value.

Important: if you agree in the substitution, please change your method information (metode-opslysninger) in DEKSONline, so it will be correct

next time. If you do not agree, please contact DEKS and let us know.

Uncertainty of results and tolerance intervals at lower concentrations

When results are reported as index values it gives a higher uncertainty to the converted values.

When a concentration of an (H-, I-, L-)index is truncated, either by the instrument or the LIS, the result's uncertainty increases. E.g. for the I-index some laboratories report only whole numbers (1, 2, 3 etc.) with the unit mg/dL, which at low concentration means that the result is associated with a large uncertainty, simply due to the rounding.

In both cases and at lower concentrations the uncertainty of the result may be large in relation to the tolerance interval.

In those specific cases laboratories should be more lenient and allow for greater deviations. The same effect is not pronounced at higher concentrations, so no lenience is recommended in those cases.

Icteric index

For the icteric index the graphical part shows a reference value, which is the "Reference target" seen in summary report for method groups. This applies for both Sample A and Sample B.

Table 1a. The icteric index for each method group of sample B. Difference% is the difference from the 'reference target'. *Pink numbers indicates a difference higher than 12%, the suggested tolerance limit.*

Method group	Result [$\mu\text{mol/L}$]	Difference %	number, n	Outlier
Reference target	426,7			
Abbott	427,0	0,1	33	0
Ortho-Clinical Diagnostics	376	-11,9	1	0
Roche	468,0	9,7	59	1
Siemens	385,1	-9,7	18	0
Roche/Hitachi	428	0,30	1	0
Beckman Coulter	359	-15,9	1	0

The 'difference %' is calculated from the "Reference target". "Reference target" = 'mean of means of all manufactory groups, larger than 3 participants'. Results for the method groups can be found in summary report prior to the individual graphical part. For sample B the most important results are shown in Table 1a.

For Sample B some differences in the levels between the method groups (instrument groups) are seen in table 1. The tolerance interval for the icteric index is 12%. This is not met for 1 out of 6 method groups (pink text) but as the target value is calculated as an average of manufacturers' levels, it is subject to some uncertainty, and it is unknown which is the true level.

Some differences in levels are seen at Sample A, but considering the lower concentration, high percentage differences are to be expected.

Table 1b. The hemolytic index for each method group of sample A and Sample B. Difference in % is the difference between Sample A and B. The number n is for results reported for sample B. Pink numbers indicates a difference higher than 5%, the suggested tolerance limit.

H-index				
	Sample A [g/L]	Sample B [g/L]	Difference %	Number, n based on Sample B
All	0,0591	0,0431	-27,1	112
Advia Chemistry	-	-	-	0
Alinity	0,0461	0,0304	-34,1	28
Architect	0,056	0,036	-35,7	5
Atellica	0,0655	0,0708	8,1	15
AU series	0,1	0,15	50	1
Cobas c-modul	0,0616	0,0414	-32,8	60
Dimension Vista	0,05	0,05	0	2
Vitros	0,15	-	-	0

Hemolytic index

Ideally Sample A and Sample B should be measured to the same concentration. However, for the hemolytic index almost all manufactures have, an interference effect on the hemolytic index due to the

icteric interference. However, it should be noted that the concentration is very low; also in a clinical perspective. Deviations at low concentrations leads to high relative deviations in percent.

Lipemic index

For the lipemic index almost all manufactures have interference from the bilirubin on the lipemic index. However, it should be noted that the concentration is very low; also in a clinical perspective. Deviations at low concentrations leads to high relative deviations in percent.

Table 1c. The lipemic index for each method group of sample A and Sample B. Difference in % is the difference between Sample A and B. The number n is for results reported for sample B. Pink numbers indicates a difference higher than 15%, the suggested tolerance limit.

L-index				
	Sample A [g/L]	Sample B [g/L]	Difference %	Number, n based on Sample B
All	0,1809	0,27	49,3	112
Advia Chemistry	0	0		1
Alinity	0,1342	0,285	112,4	26
Andre	0,24	0,29	20,8	1
Architect	0,125	0,28	124	4
Atellica	0,0703	0,111	57,9	17
AU series	0,37	0,49	32,4	0
Cobas c-modul	0,233	0,311	33,5	59
Dimension Vista	0,25	0,25	0	2
Vitros	0,2	0,2	0	1

Analytical

Components with interference

In this round interference is found in 3 out of 6 components. The components are cholesterol, creatininium and phosphate where interference is seen with bilirubin, see table 2. We recommend the participants in the relevant method groups to follow up on individual results in concern to internal procedure.

Cholesterol

For cholesterol interference above the tolerance limit is seen for all method groups except Ortho Clinical. For all groups, the degree of negative interference is similar to the interference seen in 2020, when the icteric concentration was similar (400 µmol/L). However positive interference is seen this time for Advia Chemistry and Atellica, where none was seen in 2020.

Creatinimum

For Creatinin 3 out of 8 method groups are affected with interference and exceed the tolerance limit. As mentioned in earlier reports, it is critical in connection to creatinine's application for the determination of eGFR.

Phosphate

All the groups with many instruments are above the tolerance limit. No interference was seen in 2020, when the I-index similar (400 µmol/L). In 2018, where the interference was higher interference was only seen for Dimension Vista, while the other groups weren't affected.

Components without interference

Estimated by the average of the method groups, there was no interference for ferritin, potassium and Lactatdehydrogenase(LD, LDH) in regards to the tolerance limits.

Ferritin

As seen in the graphic part and in table 2, systematic differences are seen between the major method groups. The reason for this is not known. The difference is seen in both samples, so it's not related to the addition of bilirubin (and no interference is seen)..

The results from all components can be found in "summary report" which can be found before the laboratory specific graphics in this report.

Table 2. Components with or without interference. Difference in % is the difference between sample A and B. The number n is for results reported for sample B. Red figures indicates that the tolerance limits have been exceeded:

Cholesterol					
	Sample A [mmol/L]	Sample B [mmol/L]	Difference %	Number, n based on Sample B	Tolerance limit %
All	4,26	3,68	-13,6	102	5
Advia Chemistry	4,2	4,5	7,1	1	
Alinity	4,29	3,56	-17,0	27	
Architect	4,26	3,5	-17,8	4	
Atellica	4,22	4,67	10,7	13	
AU series	4,4	3,3	-25	1	
Cobas c-modul	4,25	3,49	-17,9	54	
Dimension Vista	4,27	3,34	-21,8	1	
Vitros	4,5	4,3	-4,4	1	

Creatinimum					
	Sample A [µmol/L]	Sample B [µmol/L]	Difference %	Number, n based on Sample B	Tolerance limit %
All	76,1	71,2	-6,4	107	8
Abbott	74,8	72,3	-3,3	27	
Advia chemistry	74	71	-4,1	1	
Architect	75,5	72,4	-4,1	5	
Atellica	73,9	70,1	-5,1	15	
Beckman Coulter AU	72	72	0	1	
Cobas c-modul	77,6	69,9	-9,9	52	
Cobas c-modul, Jaffe	75,7	85	12,3	4	
Dimension Vista	75,6	68,5	-9,4	2	

Ferritin					
	Sample A [µg/L]	Sample B [µg/L]	Difference %	Number, n based on Sample B	Tolerance li- mit %
All	69,1	69,2	0,14	93	15
Alinity	64,7	65,2	0,77	23	
Architect	62,9	60,2	-4,3	4	
Atellica	42,7	42,7	0	9	
AU series	68	69	1,5	1	
Cobas c-modul	78,5	80,1	2,0	10	
Cobas e-modul	75,6	75,8	0,26	43	
Dimension Vi- sta	66	67	1,52	1	
TOSOH AIA	47,5	46,6	-1,89	1	
Vitros	64	62	-3,1	1	

Lactatdehydrogenase(LD, LDH)					
	Sample A [U/L]	Sample B [U/L]	Difference %	Number, n based on Sample B	Tolerance limit %
All	186,7	188	0,70	97	11,4
Advia Chemi- stry XPT	189	187	-1,06	1	
Alinity	188	190,4	1,28	25	
Architect	184,9	186,5	0,87	5	
Atellica	188,6	189,1	0,27	14	
AU series	175	174	-0,57	1	
Cobac c-modul	185,9	187,2	0,70	49	
Dimension Vi- sta	198	201	1,52	1	
Vitros 5,1 FS	174	167	-4,0	1	

Phosphate					
	Sample A [mmol/L]	Sample B [mmol/L]	Difference %	Number, n based on Sample B	Tolerance limit %
All	1,168	1,502	28,6	99	6
Advia Chemi- stry	1,21	1,18	-2,48	1	
Alinity	1,188	1,7	43,1	24	
Architect	1,153	1,895	64,4	4	
Atellica	1,17	1,277	9,1	14	
AU series	1,15	1,16	0,87	1	
Cobas c-modul	1,16	1,464	26,2	53	
Dimension Vista		1,35	-	1	
Vitros	1,17	1,17	0	1	

Potasium-ion					
	Sample A [mmol/L]	Sample B [mmol/L]	Difference %	Number, n based on Sample B	Tolerance limit %
All	7,92	7,92	0	106	5,6
Advia Chemi- stry XPT	7,9	8	1,27	1	
Alinity	7,89	7,94	0,63	27	
Architect	7,79	7,86	0,90	5	
Atellica	7,91	7,88	-0,38	15	
Beckman Coul- ter AU		7,6	-	1	
Cobas c-modul	7,95	7,92	-0,38	35	
Cobas ISE-mo- dul	7,95	7,95	0	19	
Dimension Vi- sta	7,85	7,9	0,64	2	
Vitros 5,1	8	8	0	1	

Postanalytical

For mutual inspiration and to strengthen the post-analytical part, we continue to encourage all participants to share their potential comments to the clinicians (the comments that would have accompanied the result of an analysis request).

We recommend that you look at your own results and compare them to any comments made, especially in relation to your own tolerance limits.

In appendix 1, the comments for clinicians can be seen. This time 50 comments have been reported.

Cholesterol

The many comments on cholesterol reflects the expected and found interference shown in table 2. 28 laboratories would correctly not have reported an answer due to icterus or would have reported an answer with a comment about icteric interference. 73 laboratories *should have* included a comment but did not. They are therefore having a general risk of releasing an answer that are falsely high or low in a true clinical situation.



Creatinimum

Those participants using a Roche instrument, where a comment was shared, are correct: Interference is present in a level outside the tolerance limit. Those without comments using Roche instruments, are in risk of releasing falsely wrong results in a true clinical situation.

3 laboratories using other instruments did also share comments about icterus, even though the interference was lower than the tolerance limit, meaning there is a risk of falsely withholding a useful result.

Ferritin

5 laboratories made comments with concerns about icterus, though no large interferences are seen.

Lactatedehydrogenase (LDH, LD)

Almost all laboratories did correctly not include a comment regarding LDH. Two laboratories did comment on icteric interference on LDH even though the interference was lower than the tolerance limit. In a true clinical situation there is a risk of falsely withholding a useful result.

Potassium

No comments were received, which is correct since no interference is present.

Phosphate

No comments were received despite the three largest method groups did have a positive interference

effect larger than the tolerance limit. It should be noted that a spread present inside those groups, so some laboratories are correct in not returning a comment, while 33 others should have returned a comment. You can see if you are correct in not returning a comment, by looking if your result for Sample B is within the tolerance limits.

End of report

Questions and comments to this scheme are always welcome to Sanne Schou:
sanne.schou@deks.dk or Morten Pedersen:
morten.pedersen@deks.dk

Kind regards

Sanne Schou and Morten Pedersen



Appendix 1 Postanalytical

The laboratories' comments to the clinicians, shown here for mutual inspiration, as there are differences in the way hemolytic test results are handled.

The following comments have accompanied the result of an analysis request.

COMPONENT	Answer to the clinician sample B	INSTRUMENT	DEKS no
P- Cholesterol	ICTE	Cobas 8000/c 702	3
	Cholesterol: Icterisk	Atellica	9
	Cannot be performed due to Icterus	Atellica	14
	B: Icteric	Cobas 6000/c 501	24
	B: Icteric	Cobas 8000/c 702	24
	B: Icteric	Cobas 8000/c 702	35
	B: Icteric	Cobas 8000/c 702	51
	The result cannot be given due to jaundice	Cobas 8000/c 702	54
	Icterus	Alinity	56
	Sample B: Not performed due to icterus	Atellica	58
	Because of high icterus of sample B our laboratory does not report answers for Chol and Crea. It is reported as Icterus.	Cobas 8000/c 702	173
	Sample B Result blocked due to high icterus. Notified physician.	Cobas 6000/c 501	507
	Sample B: Icteric	Atellica	663
	Sample B: Icteric	Atellica	663
	Icterus interferes in sample B	Cobas 6000/c 501	678
	Sample B visibly icteric. Results should be interpreted with caution due to icteria	Atellica	684
	Sample B: Chol cannot be performed due to jaundice.	Alinity	750
	The patient has elevated bilirubin. The analysis result is falsely too low.	Alinity	2552
	The analysis response is falsely too low, up to 20% too low due to high bilirubin concentration in the sample.	Alinity	2553
	Uncertain answer due to interference from high bilirubin	Architect	2559
	Sample B: Icteric sample. Gives too low a concentration.	Cobas 8000/c 702	2602
	B: Cannot be measured due to icteric sample.	Cobas 8000/c 702	2610
	Icteric sample. Can give too low a result.	Cobas C 503	2611
The sample is icteric, may give too low a test result.	Cobas C 503	2620	
Sample B: High icterum affects the result	Alinity	2626	
Sample B: Icteric sample. Gives an uncertain answer.	Cobas 6000/c 501	2628	
	Answered: Suspended due to interference from bilirubin	Cobas 6000/c 501	2637



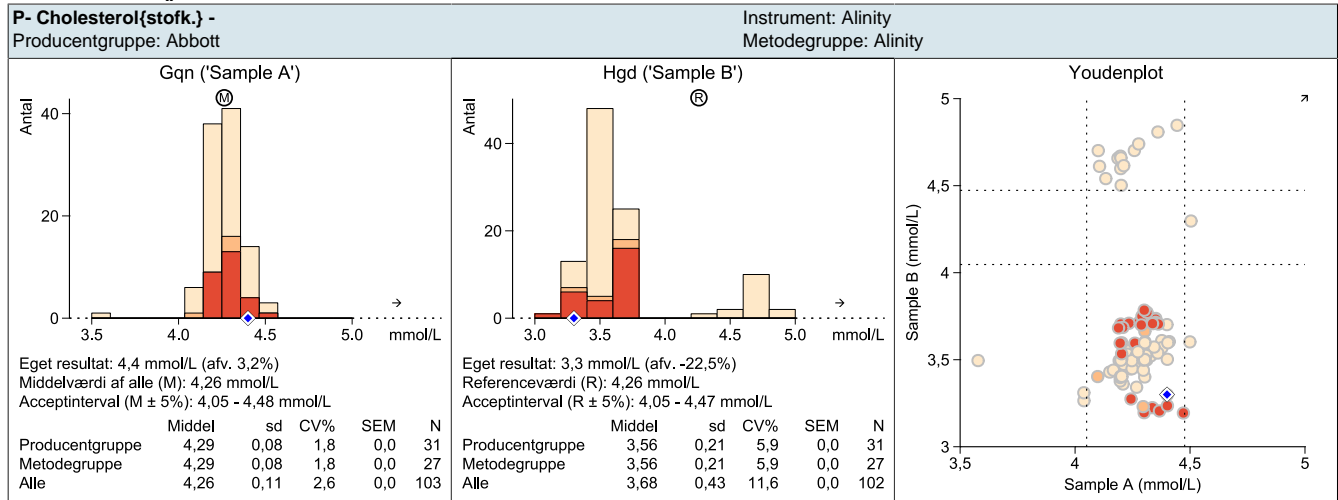
P- Cholesterol	High icterus affects the result	Alinity	2667
P- Creatininium	ICTE	Cobas 8000/c 702	3
	Sample B Jaundice	Cobas 8000/c 702	35
	Icterus. Patient sample would have been analyzed on ABL.	Cobas 8000/c 702	51
	The result cannot be given due to jaundice	Cobas 8000/c 702	54
	Icterus	Alinity	56
	Because of high icterus of sample B our laboratory does not report answers for Chol and Crea. It is reported as Icterus.	Cobas 8000/c 702	173
	with reservations due to icterus on sample B	Alinity	179
	icterus interferes in sample B	Cobas 6000/c 501	678
	Sample B: Icteric sample. Gives too low a response.	Cobas 8000/c 702	2602
	The test results are answered with the comment: "Icterus detected. Creatinine may be affected."	Advia Chemistry XPT	2604
	B: Icteric test, can give a falsely low value and the result must therefore be considered somewhat uncertain.	Cobas c 702	2610
	Icteric sample. Can give too low a result.	Cobas C 503	2611
	The sample is icteric, may give too low a test result	Cobas C 503	2620
	Sample B: Icteric sample. Gives an uncertain result.	Cobas 6000/c 501	2628
Answered: Suspended due to interference from bilirubin	Cobas 6000/c 501	2637	
P- Ferritin	ICTE	Cobas 8000/e 602	3
	Icterus	Alinity	56
	Subject to icterus on sample B	Alinity	179
	Sample B: Ferritin cannot be performed due to jaundice.	Alinity	750
	Uncertain result due to interference from high bilirubin	Architect	2559
P- LDH	With reservations due to icterus on sample b	Alinity	179
	Uncertain result due to interference from high bilirubin	Architect	2559

Component	Mean	Sd	CV	sem	N	Outliers
P- Cholesterolstofk. Sample 'Gqn'						
Alle	4,26	0,1119	2,62	0,01103	103	1
Advia Chemistry	4,2				1	0
Alinity	4,29	0,0752	1,751	0,01447	27	1
Architect	4,26	0,1109	2,6	0,0554	4	0
Atellica	4,22	0,0957	2,27	0,0266	13	0
AU series	4,4				1	0
Cobas c-modul	4,25	0,1256	2,95	0,01693	55	0
Dimension Vista	4,27				1	0
Vitros	4,5				1	0
P- Cholesterolstofk. Sample 'Hgd'						
<i>Reference Target</i>	4,26					
Alle	3,68	0,426	11,57	0,0421	102	1
Advia Chemistry	4,5				1	0
Alinity	3,56	0,21	5,9	0,0405	27	1
Architect	3,5	0,229	6,53	0,1143	4	0
Atellica	4,67	0,0867	1,854	0,024	13	0
AU series	3,3				1	0
Cobas c-modul	3,49	0,0786	2,25	0,0107	54	0
Dimension Vista	3,34				1	0
Vitros	4,3				1	0
P- Creatininiumstofk. Sample 'Gqn'						
Alle	76,1	2,34	3,08	0,226	107	2
Enzymatic	76,2	2,37	3,11	0,242	96	1
Jaffe	74,9	1,767	2,36	0,533	11	1
P- Creatininiumstofk. Sample 'Hgd'						
<i>Reference Target</i>	76,1					
Alle	71,2	4,55	6,4	0,44	107	2
Enzymatic	70,4	2,69	3,83	0,275	96	1
Jaffe	78,4	9,36	11,93	2,82	11	1
P- Ferritinmassek. Sample 'Gqn'						
Alle	69,1	10,79	15,61	1,125	92	1
Alinity	64,7	4,8	7,42	1,001	23	0
Architect	62,9	4,34	6,89	2,17	4	0
Atellica	42,7	2,13	4,99	0,753	8	1
AU series	68				1	0
Cobas c-modul	78,5	4,01	5,11	1,268	10	0
Cobas e-modul	75,6	3,35	4,44	0,511	43	0
Dimension Vista	66				1	0
TOSOH AIA	47,5				1	0
Vitros	64				1	0
P- Ferritinmassek. Sample 'Hgd'						
<i>Reference Target</i>	69,1					
Alle	69,2	11,34	16,4	1,176	93	0
Alinity	65,2	4,03	6,19	0,841	23	0
Architect	60,2	2,06	3,42	1,029	4	0
Atellica	42,7	2,14	5,02	0,714	9	0
AU series	69				1	0
Cobas c-modul	80,1	4	4,99	1,264	10	0
Cobas e-modul	75,8	3,83	5,05	0,585	43	0
Dimension Vista	67				1	0
TOSOH AIA	46,6				1	0
Vitros	62				1	0
P- H - Hæmolyse Index Sample 'Gqn'						
Alle	0,0591	0,0225	38	0,00212	113	1
Advia Chemistry					0	1
Alinity	0,0461	0,0208	45,1	0,00393	28	0
Andre	0,08				1	0
Architect	0,056	0,01517	27,1	0,00678	5	0
Atellica	0,0655	0,01789	27,3	0,00462	15	0
AU series	0,1				1	0
Cobas c-modul	0,0616	0,01986	32,2	0,00256	60	0
Dimension Vista	0,05	0	0	0	2	0
Vitros	0,15				1	0

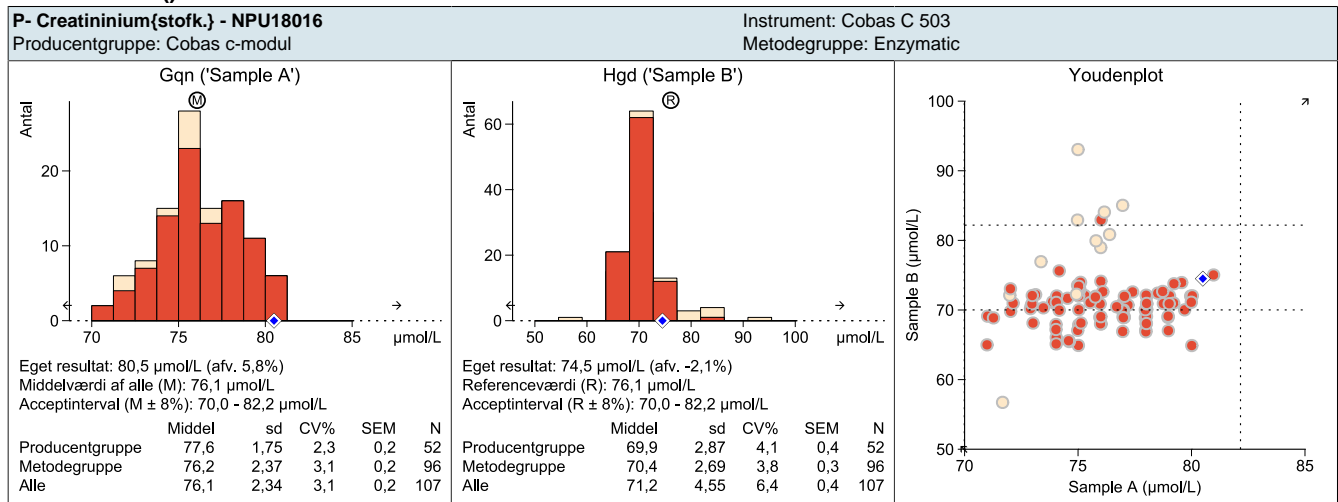
Component	Mean	Sd	CV	sem	N	Outliers
P- H - Hæmolyse Index Sample 'Hgd'						
<i>Reference Target</i>	0,0591					
Alle	0,0431	0,037	85,7	0,00349	112	1
Advia Chemistry					0	1
Alinity	0,0304	0,037	121,8	0,00699	28	0
Andre	0				1	0
Architect	0,036	0,0329	91,3	0,0147	5	0
Atellica	0,0708	0,0213	30,1	0,00549	15	0
AU series	0,15				1	0
Cobas c-modul	0,0414	0,0355	85,6	0,00458	60	0
Dimension Vista	0,05	0	0	0	2	0
P- I - Icterisk Index Sample 'Gqn'						
<i>Reference Target</i>	17,3					
Alle	17,14	6,77	39,5	0,64	112	2
Advia Chemistry					0	1
Alinity	19,95	10,69	53,6	2,02	28	0
Andre	17,1				1	0
Architect	16,92	1,339	7,91	0,599	5	0
Atellica	16,65	6,67	40	1,721	15	0
AU series	9,41				1	0
Cobas c-modul	15,79	3,46	21,9	0,45	59	1
Dimension Vista	17,1	0	0	0	2	0
Vitros	34,2				1	0
P- I - Icterisk Index Sample 'Hgd'						
<i>Reference Target</i>	427					
Alle	441	61,3	13,91	5,77	113	1
Advia Chemistry	257				1	0
Alinity	426	70,1	16,46	13,25	28	0
Andre	428				1	0
Architect	433	61,7	14,25	27,6	5	0
Atellica	416	38,8	9,33	10,03	15	0
AU series	359				1	0
Cobas c-modul	468	28	5,98	3,64	59	1
Dimension Vista	214	0	0	0	2	0
Vitros	376				1	0
P- Kalium-ionstofk. Sample 'Gqn'						
Alle	7,92	0,0864	1,091	0,00839	106	2
Advia Chemistry XPT	7,9				1	0
Alinity	7,89	0,075	0,95	0,01417	28	0
Architect	7,79	0,01414	0,1815	0,00707	4	1
Atellica	7,91	0,0737	0,933	0,01904	15	0
Beckman Coulter AU					0	1
Cobas c-modul	7,95	0,091	1,146	0,01539	35	0
Cobas ISE-modul	7,95	0,0753	0,946	0,01683	20	0
Dimension Vista	7,85	0,0707	0,901	0,05	2	0
Vitros 5,1	8				1	0
P- Kalium-ionstofk. Sample 'Hgd'						
<i>Reference Target</i>	7,92					
Alle	7,92	0,0966	1,219	0,00938	106	2
Advia Chemistry XPT	8				1	0
Alinity	7,94	0,1162	1,464	0,0224	27	1
Architect	7,86	0,055	0,699	0,0246	5	0
Atellica	7,88	0,0873	1,108	0,0225	15	0
Beckman Coulter AU	7,6				1	0
Cobas c-modul	7,92	0,075	0,947	0,01268	35	0
Cobas ISE-modul	7,95	0,0866	1,089	0,01987	19	1
Dimension Vista	7,9	0	0	0	2	0
Vitros 5,1	8				1	0
P- L - Lipæmisk Index Sample 'Gqn'						
Alle	0,1977	0,083	42	0,00781	113	0
Advia Chemistry	0,12				1	0
Alinity	0,1326	0,04	30,1	0,00769	27	0
Andre	0,23				1	0
Architect	0,14	0,01225	8,75	0,00548	5	0
Atellica	0,0931	0,0322	34,6	0,00831	15	0
AU series	0,35				1	0
Cobas c-modul	0,246	0,0336	13,64	0,00433	60	0
Dimension Vista	0,5	0	0	0	2	0
Vitros	0,2				1	0

Component	Mean	Sd	CV	sem	N	Outliers
P- L - Lipæmisk Index Sample 'Hgd'						
<i>Reference Target</i>	0,1977					
Alle	0,294	0,1797	61,1	0,0169	113	1
Advia Chemistry	0,12				1	0
Alinity	0,1886	0,078	41,4	0,01474	28	0
Andre	0,54				1	0
Architect	0,156	0,0559	35,9	0,025	5	0
Atellica	0,112	0,0533	47,6	0,01377	15	0
AU series	0,45				1	0
Cobas c-modul	0,383	0,1605	41,9	0,0209	59	1
Dimension Vista	0,75	0	0	0	2	0
Vitros	0,27				1	0
P- Lactatdehydrogenase(LD, LDH)kat.k. Sample 'Gqn'						
Alle	186,7	6,84	3,66	0,691	98	2
Advia Chemistry XPT	189				1	0
Alinity	188	7,73	4,11	1,547	25	0
Architect	184,9	10,82	5,85	4,84	5	0
Atellica	188,6	5,64	2,99	1,507	14	0
AU series	175				1	0
Cobac c-modul	185,9	5,8	3,12	0,82	50	2
Dimension Vista	198				1	0
Vitros 5,1 FS	174				1	0
P- Lactatdehydrogenase(LD, LDH)kat.k. Sample 'Hgd'						
<i>Reference Target</i>	186,7					
Alle	188	6,96	3,7	0,707	97	2
Advia Chemistry XPT	187				1	0
Alinity	190,4	6,69	3,52	1,339	25	0
Architect	186,5	3,34	1,794	1,496	5	0
Atellica	189,1	5,83	3,08	1,559	14	0
AU series	174				1	0
Cobac c-modul	187,2	6,58	3,52	0,94	49	2
Dimension Vista	201				1	0
Vitros 5,1 FS	167				1	0
P- Phosphat(P, uorganisk)stofk. Sample 'Gqn'						
Alle	1,168	0,044	3,77	0,00443	99	1
Advia Chemistry	1,21				1	0
Alinity	1,188	0,0456	3,84	0,00931	24	0
Architect	1,153	0,0299	2,59	0,01493	4	0
Atellica	1,17	0,042	3,59	0,01122	14	0
AU series	1,15				1	0
Cobas c-modul	1,16	0,0434	3,75	0,00591	54	0
Dimension Vista					0	1
Vitros	1,17				1	0
P- Phosphat(P, uorganisk)stofk. Sample 'Hgd'						
<i>Reference Target</i>	1,168					
Alle	1,502	0,552	36,8	0,0555	99	0
Advia Chemistry	1,18				1	0
Alinity	1,7	0,611	36	0,1247	24	0
Architect	1,895	0,53	28	0,265	4	0
Atellica	1,277	0,319	24,9	0,0852	14	0
AU series	1,16				1	0
Cobas c-modul	1,464	0,562	38,4	0,0772	53	0
Dimension Vista	1,35				1	0
Vitros	1,17				1	0

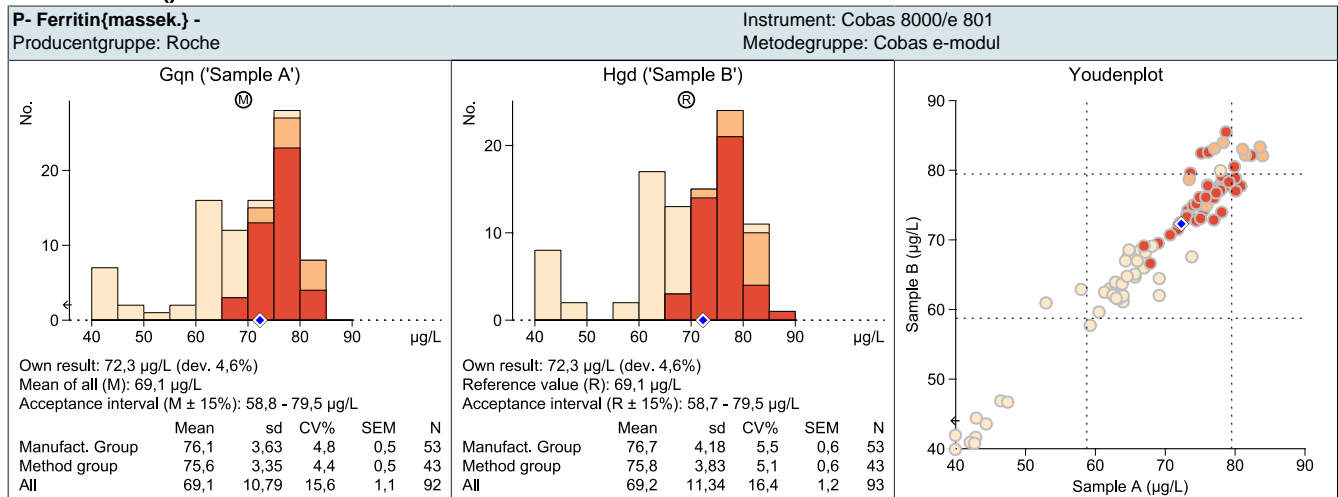
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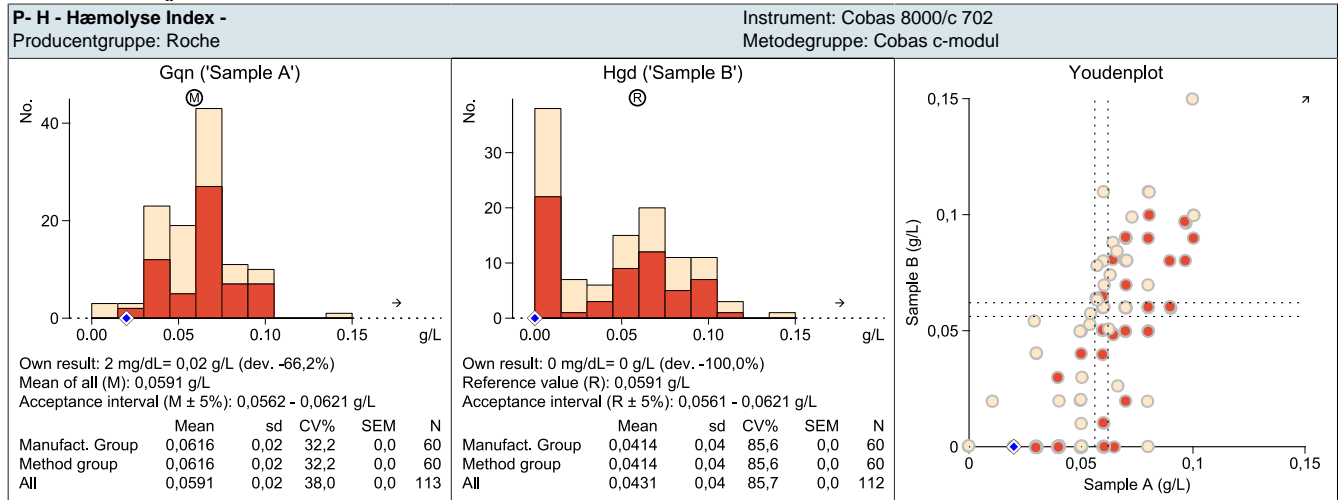
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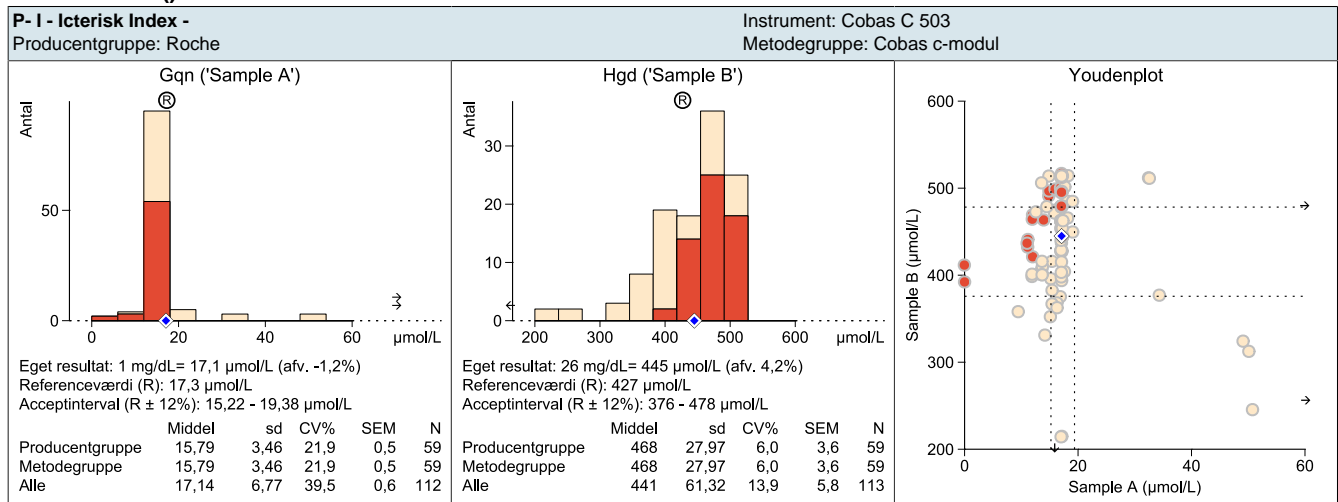
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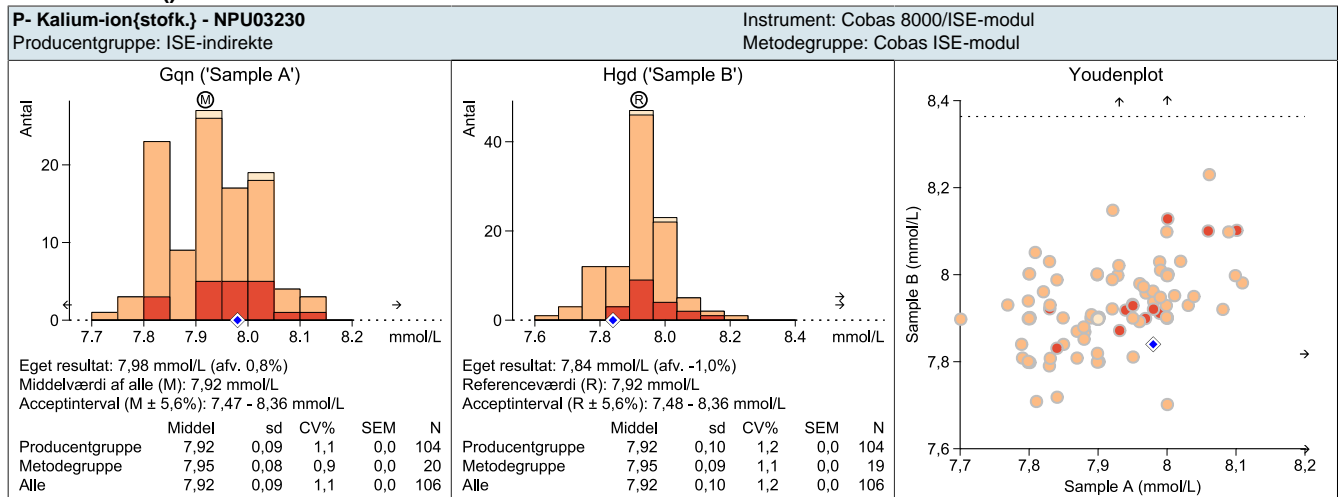
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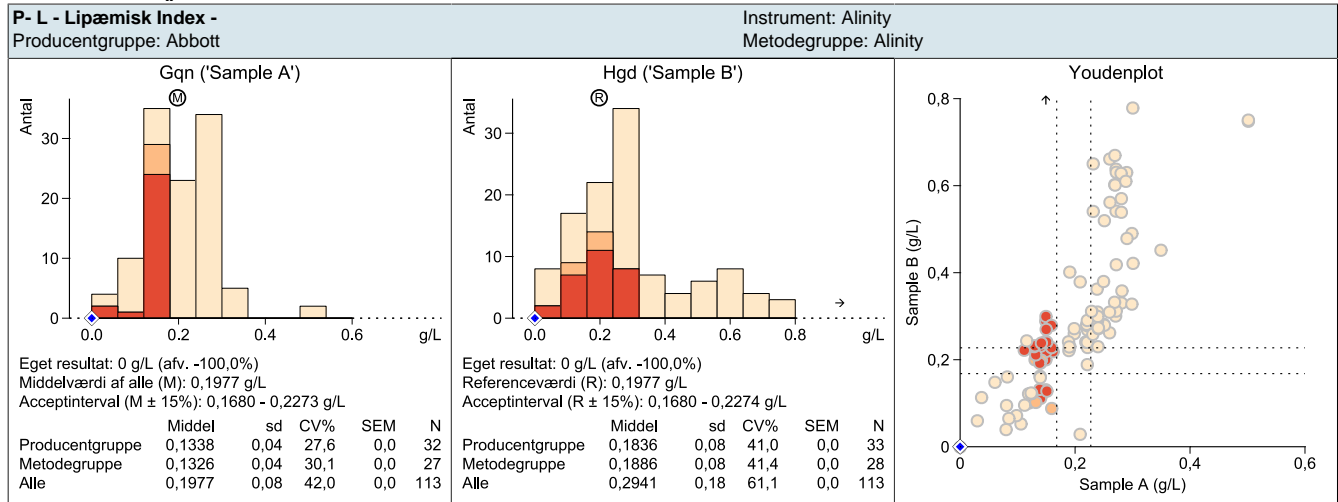
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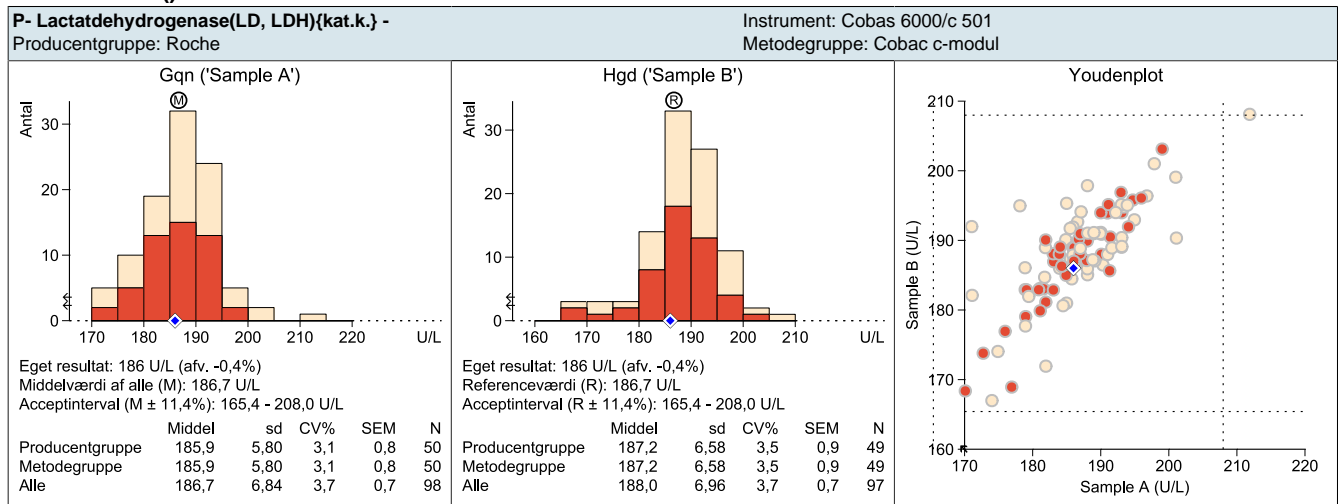
Metodesæt 1 ()



Metodesæt 1)



Metodesæt 2)



Metodesæt 4)

