

## Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of groups n = 5

## EQA round: PRO1/19 - Specific Proteins

Dead line: 22.02.2019

RoM = robust average	AV = assigned value	Dmax = acceptable percent difference
SD = standard deviation	CRV = certified reference value	LL = lower limit
CV = coefficient of variation	RV = reference value	UL = upper limit
Ntot = total number of participants	CVE = consensus value from experts	Neva = number of evaluated participants
Nout = number of results excluded before calculation	CVP = consensus value from all participants	Nsuc = number of successful participants
	CVPG = consensus value from participants groups	Srel = success (relative)
	U <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]						Comparability							
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
<b>(41) IgA</b>					220							220	218	99%
Samples and groups	[g/L]													
<b>Sample A</b>		1,82	0,071	3,9	220	CVP	1,82	0,012	16%	1,52	2,12	220	219	100%
(2) Immunoturbidimetry		1,82	0,07	3,8	184	0						184		
(3) Immunonephelometry		1,81	0,079	4,4	35	0						35		
Other					1	0						1		
						1x99								
<b>Sample B</b>		2,53	0,094	3,7	220	CVP	2,53	0,016	16%	2,12	2,94	220	218	99%
(2) Immunoturbidimetry		2,53	0,093	3,7	184	0						184		
(3) Immunonephelometry		2,53	0,099	3,9	35	0						35		
Other					1	0						1		
						1x99								
<b>(42) IgG</b>					221							221	220	100%
Samples and groups	[g/L]													
<b>Sample A</b>		8,04	0,35	4,4	221	CVP	8,04	0,059	15%	6,83	9,25	221	220	100%
(2) Immunoturbidimetry		8,01	0,35	4,4	185	0						185		
(3) Immunonephelometry		8,16	0,37	4,6	35	0						35		
Other					1	0						1		
						1x99								
<b>Sample B</b>		11,1	0,45	4,0	221	CVP	11,1	0,074	15%	9,43	12,8	221	221	100%
(2) Immunoturbidimetry		11,0	0,41	3,7	185	0						185		
(3) Immunonephelometry		11,3	0,60	5,3	35	0						35		
Other					1	0						1		
						1x99								
<b>(43) IgM</b>					220							220	217	99%
Samples and groups	[g/L]													
<b>Sample A</b>		0,520	0,027	5,2	220	CVP	0,52	0,0045	18%	0,426	0,614	220	218	99%
(2) Immunoturbidimetry		0,519	0,026	5,0	184	0						184		
(3) Immunonephelometry		0,528	0,031	5,8	35	0						35		
Other					1	0						1		
						1x99								
<b>Sample B</b>		0,743	0,035	4,7	220	CVP	0,743	0,0058	18%	0,609	0,877	220	218	99%
(2) Immunoturbidimetry		0,741	0,034	4,6	184	0						184		
(3) Immunonephelometry		0,749	0,039	5,3	35	0						35		
Other					1	0						1		
						1x99								
<b>(44) Transferrin</b>					201							201	199	99%
Samples and groups	[g/L]													
<b>Sample A</b>		2,28	0,076	3,3	201	CVP	2,28	0,013	14%	1,96	2,6	201	199	99%
(2) Immunoturbidimetry		2,28	0,068	3,0	181	1						181		
(3) Immunonephelometry		2,21	0,10	4,7	20	0						20		
<b>Sample B</b>		3,16	0,12	3,9	201	CVP	3,16	0,021	14%	2,71	3,61	201	200	100%
(2) Immunoturbidimetry		3,17	0,11	3,5	181	0						181		
(3) Immunonephelometry		3,03	0,15	5,0	20	0						20		
<b>(46) alpha-1-antitrypsin</b>					86							86	84	98%
Samples and groups	[g/L]													
<b>Sample A</b>		1,08	0,06	5,6	86	CVP	1,08	0,016	25%	0,81	1,35	86	84	98%
(2) Immunoturbidimetry		1,08	0,056	5,2	59	0						59		
(3) Immunonephelometry		1,09	0,07	6,4	27	0						27		
<b>Sample B</b>		1,48	0,085	5,7	86	CVP	1,48	0,022	25%	1,11	1,85	86	85	99%
(2) Immunoturbidimetry		1,47	0,069	4,7	59	0						59		
(3) Immunonephelometry		1,51	0,12	7,6	27	0						27		
<b>(47) C3 complement</b>					138							138	133	96%
Samples and groups	[g/L]													
<b>Sample A</b>		0,799	0,061	7,6	138	CVP	0,799	0,013	17%	0,663	0,935	138	134	97%
(2) Immunoturbidimetry		0,812	0,054	6,6	102	0						102		
(3) Immunonephelometry		0,754	0,077	10	36	0						36		
<b>Sample B</b>		1,14	0,074	6,5	138	CVP	1,14	0,016	17%	0,946	1,34	138	136	99%
(2) Immunoturbidimetry		1,15	0,068	5,9	102	0						102		
(3) Immunonephelometry		1,08	0,086	8,0	36	0						36		
<b>(48) Prealbumin</b>					117							117	115	98%
Samples and groups	[g/L]													
<b>Sample A</b>		0,269	0,012	4,5	117	CVP	0,269	0,0027	23%	0,207	0,331	117	117	100%
(2) Immunoturbidimetry		0,269	0,012	4,3	101	0						101		
(3) Immunonephelometry		0,264	0,009	3,7	16	0						16		
<b>Sample B</b>		0,428	0,023	5,4	117	CVP	0,428	0,0052	23%	0,329	0,527	117	115	98%

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## EQA round: PRO1/19 - Specific Proteins

Dead line: 22.02.2019

Test	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability								
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>	
<b>(48) Prealbumin</b>					117							117	115	98%	
Samples and groups	[g/L]														
<b>Sample B</b>		0,428	0,023	5,4	117		CVP	0,428	,0052	23%	0,329	0,527	117	115	98%
(2) Immunoturbidimetry		0,426	0,02	4,6	101	0							101		
(3) Immunonephelometry		0,448	0,04	8,8	16	0							16		
<b>(49) Ceruloplasmin</b>					71							67	64	96%	
Samples and groups	[g/L]														
<b>Sample A</b>		0,252	0,034	13	71							67	65	97%	
(2) Immunoturbidimetry; (58) Beckman Coulter (Olympus)		0,241	0,014	5,6	12	0	CVPG	0,241	,0095	19%	0,195	0,287	12		
(2) Immunoturbidimetry; (60) Roche		0,225	0,011	4,7	17	0	CVPG	0,225	,0063	19%	0,182	0,268	17		
(2) Immunoturbidimetry; (91) Binding Site		0,225	0,037	16	9	0	CVPG	0,225	0,046	19%	0,182	0,268	9		
(3) Immunonephelometry; (12) Beckman Coulter		0,270	0,01	3,7	10	0	CVPG	0,267	0,010	19%	0,216	0,318	10		
(3) Immunonephelometry; (149) Siemens (Dade)		0,282	0,015	5,4	13	0	CVPG	0,282	0,010	19%	0,228	0,336	13		
Other					10	0							6		
								2x 2/1, 1x 2/5, 1x 2/12, 1x 2/49, 4x 2/116, 1x 3/116							
<b>Sample B</b>		0,385	0,051	13	71							67	66	99%	
(2) Immunoturbidimetry; (58) Beckman Coulter (Olympus)		0,364	0,011	3,1	12	0	CVPG	0,364	,0079	19%	0,294	0,434	12		
(2) Immunoturbidimetry; (60) Roche		0,343	0,02	5,9	17	0	CVPG	0,343	0,012	19%	0,277	0,409	17		
(2) Immunoturbidimetry; (91) Binding Site		0,368	0,085	23	9	0	CVPG	0,368	0,11	19%	0,298	0,438	9		
(3) Immunonephelometry; (12) Beckman Coulter		0,418	0,028	6,7	10	0	CVPG	0,414	0,023	19%	0,335	0,493	10		
(3) Immunonephelometry; (149) Siemens (Dade)		0,428	0,02	4,7	13	0	CVPG	0,428	0,014	19%	0,346	0,51	13		
Other					10	0							6		
								2x 2/1, 1x 2/5, 1x 2/12, 1x 2/49, 4x 2/116, 1x 3/116							
<b>(50) Orosomuroid</b>					67							67	64	96%	
Samples and groups	[g/L]														
<b>Sample A</b>		0,631	0,044	7,0	67		CVP	0,631	0,013	20%	0,504	0,758	67	64	96%
(2) Immunoturbidimetry		0,623	0,043	7,0	47	1							47		
(3) Immunonephelometry		0,649	0,04	6,2	20	0							20		
<b>Sample B</b>		0,877	0,044	5,0	67		CVP	0,877	0,013	20%	0,701	1,06	67	66	99%
(2) Immunoturbidimetry		0,868	0,04	4,6	47	0							47		
(3) Immunonephelometry		0,897	0,043	4,8	20	0							20		
<b>(51) Haptoglobin</b>					70							70	67	96%	
Samples and groups	[g/L]														
<b>Sample A</b>		1,04	0,047	4,5	70		CVP	1,04	0,014	13%	0,904	1,18	70	69	99%
(2) Immunoturbidimetry		1,04	0,043	4,1	53	0							53		
(3) Immunonephelometry		1,05	0,061	5,8	17	0							17		
<b>Sample B</b>		1,45	0,057	3,9	70		CVP	1,45	0,017	13%	1,26	1,64	70	67	96%
(2) Immunoturbidimetry		1,45	0,051	3,5	53	0							53		
(3) Immunonephelometry		1,44	0,099	6,9	17	0							17		
<b>(52) C4 complement</b>					138							138	133	96%	
Samples and groups	[g/L]														
<b>Sample A</b>		0,205	0,017	8,2	138		CVP	0,205	,0035	21%	0,161	0,249	138	133	96%
(2) Immunoturbidimetry		0,203	0,018	9,0	102	0							102		
(3) Immunonephelometry		0,210	0,009	4,7	36	0							36		
<b>Sample B</b>		0,372	0,027	7,3	138		CVP	0,372	,0057	21%	0,293	0,451	138	137	99%
(2) Immunoturbidimetry		0,372	0,03	8,1	102	0							102		
(3) Immunonephelometry		0,373	0,018	4,9	36	0							36		
<b>(53) a-2-macroglobulin</b>					23							23	23	100%	
Samples and groups	[g/L]														
<b>Sample A</b>		1,62	0,093	5,8	23		CVP	1,62	0,048	21%	1,27	1,97	23	23	100%
(2) Immunoturbidimetry		1,56	0,045	2,9	7	0							7		
(3) Immunonephelometry		1,64	0,097	5,9	16	0							16		
<b>Sample B</b>		2,21	0,12	5,5	23		CVP	2,21	0,062	21%	1,74	2,68	23	23	100%
(2) Immunoturbidimetry		2,18	0,093	4,3	7	0							7		
(3) Immunonephelometry		2,23	0,15	6,5	16	0							16		
<b>(55) Total protein</b>					194							194	189	97%	
Samples and groups	[g/L]														
<b>Sample A</b>		49,8	4,2	8,4	194		CVP	49,8	0,73	17%	41,3	58,3	194	192	99%
(1) Biuret		49,8	4,2	8,4	193	0							193		
Other					1	0							1		
								1x 99							
<b>Sample B</b>		69,5	4,0	5,7	194		CVP	69,5	0,70	12%	61,1	77,9	194	189	97%
(1) Biuret		69,5	4,0	5,7	193	0							193		
Other					1	0							1		
								1x 99							

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Dead line: 22.02.2019

Test	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability								
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>	
<b>(56) Soluble Transferrin Receptor (sTfR)</b>					54							48	47	98%	
Samples and groups															
<b>Sample A</b>		2,04	1,0	49	54							48	47	98%	
(2) Immunoturbidimetry; (60) Roche		2,81	0,12	4,4	30	0	CVPG	2,81	0,055	30%	1,96	3,66	30		
(3) Immunonephelometry; (149) Siemens (Dade)		1,17	0,052	4,5	9	0	CVPG	1,17	0,064	30%	0,819	1,53	9		
(99) Another measurement principle; (12) Beckman Coulter		1,09	0,13	12	7	1	CVPG	1,1	0,11	30%	0,77	1,43	7		
Other					8	0							2		
								2x 2/12, 2x 2/75, 2x 2/166, 1x 99/49, 1x 99/58							
<b>Sample B</b>		2,87	1,4	50	54							48	47	98%	
(2) Immunoturbidimetry; (60) Roche		3,94	0,23	5,8	30	0	CVPG	3,94	0,10	30%	2,75	5,13	30		
(3) Immunonephelometry; (149) Siemens (Dade)		1,61	0,022	1,4	9	0	CVPG	1,61	0,028	30%	1,12	2,1	9		
(99) Another measurement principle; (12) Beckman Coulter		1,56	0,082	5,2	7	1	CVPG	1,57	0,079	30%	1,09	2,05	7		
Other					8	0							2		
								2x 2/12, 2x 2/75, 2x 2/166, 1x 99/49, 1x 99/58							

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End of report

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