

EQA round: PRO2/24 - Specific Proteins

Deadline: 20.9.2024

Setup: groups - M (measurement principle); minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D _{max} = acceptable difference
SD = standard deviation	CVP = consensus of all participants	LL = lower limit
CV = coefficient of variation	CVPG = consensus of the participants' groups	UL = upper limit
N _{tot} = total number of the results	U _{AV} = expanded uncertainty of the assigned value (k = 2)	N _{eva} = number of the results assessed
N _{out} = number of the results removed before calculation		N _{suc} = number of successful results
		S _{rel} = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]	
							AV	U _{AV}	D _{max}	LL	UL				
(46) α-1-antitrypsin	[g/L]				84							84	76	90	
Sample A		0,671	0,098	15	84		CVP	0,671	0,026	25%	0,503	0,839	84	79	94
(2) Immunoturbidimetry		0,661	0,11	16	66	0							66		
(3) Immunonephelometry		0,709	0,049	6,9	18	0							18		
Sample B		2,42	0,5	21	84		CVP	2,42	0,13	25%	1,81	3,03	84	80	95
(2) Immunoturbidimetry		2,37	0,49	21	66	0							66		
(3) Immunonephelometry		2,6	0,45	18	18	0							18		
(53) α-2-macroglobulin	[g/L]				19							19	18	95	
Sample A		0,867	0,069	8	19		CVP	0,867	0,039	21%	0,684	1,05	19	18	95
(2) Immunoturbidimetry		0,888	0,1	11	8	0							8		
(3) Immunonephelometry		0,861	0,069	8	11	0							11		
Sample B		3,38	0,27	7,9	19		CVP	3,38	0,15	21%	2,67	4,09	19	19	100
(2) Immunoturbidimetry		3,47	0,41	12	8	0							8		
(3) Immunonephelometry		3,38	0,24	7,2	11	0							11		
(45) Albumin	[g/L]				166							166	153	92	
Sample A		21	1,1	5,2	166		CVP	21	0,21	12%	18,4	23,6	166	162	98
(1) BCG		21	1,1	5,1	153	0							153		
(2) BCP		20	1,4	7,1	8	0							8		
Other					5	0							5		
							3x 0, 2x 99								
Sample B		68,9	4,9	7,1	166		CVP	68,9	0,93	12%	60,6	77,2	166	155	93
(1) BCG		68,9	4,8	7	153	0							153		
(2) BCP		66	5,9	9	8	0							8		
Other					5	0							5		
							3x 0, 2x 99								
(47) C3 complement	[g/L]				126							126	122	97	
Sample A		0,711	0,036	5	126		CVP	0,711	0,008	14%	0,611	0,811	126	124	98
(2) Immunoturbidimetry		0,71	0,035	5	106	0							106		
(3) Immunonephelometry		0,719	0,038	5,2	20	0							20		
Sample B		2,37	0,11	4,8	126		CVP	2,37	0,025	14%	2,03	2,71	126	124	98
(2) Immunoturbidimetry		2,37	0,11	4,7	106	0							106		
(3) Immunonephelometry		2,4	0,14	5,9	20	0							20		
(52) C4 complement	[g/L]				126							126	119	94	
Sample A		0,073	0,009	13	126		CVP	0,073	0,002 ±0,032		0,041	0,105	126	124	98
(2) Immunoturbidimetry		0,072	0,009	13	105	0							105		
(3) Immunonephelometry		0,079	0,002	1,9	21	0							21		
Sample B		0,253	0,029	11	126		CVP	0,253	0,006	21%	0,199	0,307	126	121	96
(2) Immunoturbidimetry		0,249	0,029	12	105	0							105		
(3) Immunonephelometry		0,269	0,019	7,1	21	0							21		
(55) Total protein	[g/L]				212							212	208	98	
Sample A		30,2	3,5	12	212		CVP	30,2	0,59	24%	22,9	37,5	212	208	98
(1) Biuret		30,2	3,5	12	210	0							210		
Other					2	0							2		
							1x 0, 1x 99								
Sample B		111	4,1	3,7	212		CVP	111	0,69	18%	91	131	212	212	100
(1) Biuret		111	4,1	3,7	210	0							210		
Other					2	0							2		
							1x 0, 1x 99								
(49) Ceruloplasmin	[g/L]				66							61	57	93	
Sample A		0,123	0,027	22	66							61	58	95	
(2) Immunoturbidimetry; (1) Abbott		0,155	0,007	4,8	7	0	CVPG	0,155	0,007	19%	0,125	0,185	7		
(2) Immunoturbidimetry; (58) Beckman Coulter (AU)		0,114	0,008	7,2	9	0	CVPG	0,114	0,01	19%	0,092	0,136	9		
(2) Immunoturbidimetry; (60) Roche		0,096	0,007	7,2	16	0	CVPG	0,096	0,004	19%	0,077	0,115	16		
(2) Immunoturbidimetry; (91) Binding Site		0,127	0,01	7,6	10	0	CVPG	0,127	0,007	19%	0,102	0,152	10		
(2) Immunoturbidimetry; (116) Sentinel Diagnostics		0,14	0	0	5	0	CVPG	0,14		19%	0,113	0,167	5		
(3) Immunonephelometry; (149) Siemens (Dade, BN, Dimension)		0,155	0,007	4,8	8	0	CVPG	0,155	0,006	19%	0,125	0,185	8		
Other					11	0							6		
							1x 2/5, 2x 2/12, 1x 2/162, 4x 3/12, 2x 3/162, 1x 3/999								
Sample B		0,5	0,13	26	66							61	60	98	
(2) Immunoturbidimetry; (1) Abbott		0,585	0,007	1,3	7	0	CVPG	0,585	0,007	19%	0,473	0,697	7		

EQA round: PRO2/24 - Specific Proteins

Deadline: 20.9.2024

Setup: groups - M (measurement principle); minimal size of the groups n = 5

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]	
							AV	U _{AV}	D _{max}	LL	UL				
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		0,549	0,03	5,5	14	0	CVPG	0,548	0,017	20%	0,438	0,658	14		
(6) IMT, IMN; (60) Roche		1,16	0,04	3,4	21	0	CVPG	1,17	0,019	20%	0,936	1,41	21		
(6) IMT, IMN; (149) Siemens (Dade, BN, Dimension)		0,49	0,045	9,2	6	0	CVPG	0,51	0,057	20%	0,408	0,612	6		
Other					22	0							9		
															1x 2/12, 4x 2/60, 2x 2/999, 2x 3/149, 4x 6/75, 2x 6/162, 1x 6/166, 4x 6/999, 1x 99/12, 1x 99/60
Sample B		2,91	1,5	50	63								50	49	98
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		2,04	0,1	4,9	14	0	CVPG	2,04	0,051	20%	1,63	2,45	14		
(6) IMT, IMN; (60) Roche		4,43	0,098	2,2	21	0	CVPG	4,43	0,043	20%	3,54	5,32	21		
(6) IMT, IMN; (149) Siemens (Dade, BN, Dimension)		1,92	0,074	3,9	6	0	CVPG	1,9	0,085	20%	1,52	2,28	6		
Other					22	0							9		
															1x 2/12, 4x 2/60, 2x 2/999, 2x 3/149, 4x 6/75, 2x 6/162, 1x 6/166, 4x 6/999, 1x 99/12, 1x 99/60
(44) Transferrin	[g/L]				204								204	198	97
Sample A		1,32	0,042	3,2	204		CVP	1,32	0,007	12%	1,16	1,48	204	202	99
(2) Immunoturbidimetry		1,32	0,04	3	199	0							199		
(3) Immunonephelometry		1,26	0,007	0,59	5	0							5		
Sample B		5,22	0,22	4,2	204		CVP	5,22	0,038	12%	4,59	5,85	204	199	98
(2) Immunoturbidimetry		5,22	0,22	4,2	199	0							199		
(3) Immunonephelometry		5,28	0,26	4,9	5	0							5		