

EQA round: PRO1/25 - Specific Proteins

Deadline: 28.2.2025

Setup: groups - M (measurement principle); Slovakia; 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]				20							20	20	100	
Sample A		0,678	0,073	11	20		CVP	0,684	0,02	25%	0,513	0,855	20	20	100
(2) Immunoturbidimetry		0,672	0,069	10	18	0							18		
Other					2	0							2		
							2x 3								
Sample B		1,53	0,15	9,8	20		CVP	1,57	0,045	25%	1,17	1,97	20	20	100
(2) Immunoturbidimetry		1,51	0,15	9,6	18	0							18		
Other					2	0							2		
							2x 3								
(53) α-2-macroglobulin	[g/L]				7							7	7	100	
Sample A		0,858	0,085	9,9	7		CVP	0,87	0,024	21%	0,687	1,06	7	7	100
(2) Immunoturbidimetry		0,84	0,059	7,1	5	0							5		
Other					2	0							2		
							2x 3								
Sample B		2,44	0,2	8,3	7		CVP	2,52	0,075	21%	1,99	3,05	7	7	100
(2) Immunoturbidimetry		2,41	0,16	6,7	5	0							5		
Other					2	0							2		
							2x 3								
(45) Albumin	[g/L]				38							38	37	97	
Sample A		21,2	0,81	3,8	38		CVP	21,3	0,16	10%	19,1	23,5	38	37	97
(1) BCG		21,2	0,79	3,7	35	0							35		
Other					3	0							3		
							2x 2, 1x 99								
Sample B		46,4	1,4	3	38		CVP	46,8	0,24	10%	42,1	51,5	38	38	100
(1) BCG		46,4	1,4	3,1	35	0							35		
Other					3	0							3		
							2x 2, 1x 99								
(47) C3 complement	[g/L]				29							29	24	83	
Sample A		0,409	0,034	8,3	29		CVP	0,417	0,005	14%	0,358	0,476	29	27	93
(2) Immunoturbidimetry		0,41	0,034	8,4	27	0							27		
Other					2	0							2		
							2x 3								
Sample B		0,898	0,072	8,1	29		CVP	0,938	0,011	14%	0,806	1,07	29	25	86
(2) Immunoturbidimetry		0,896	0,075	8,3	27	0							27		
Other					2	0							2		
							2x 3								
(52) C4 complement	[g/L]				29							29	26	90	
Sample A		0,035	0,008	22	29		CVP	0,037	0,002	asym.	0,01	0,08	29	29	100
(2) Immunoturbidimetry		0,034	0,007	20	27	0							27		
Other					2	0							2		
							2x 3								
Sample B		0,09	0,014	15	29		CVP	0,091	0,003	21%	0,071	0,111	29	26	90
(2) Immunoturbidimetry		0,089	0,013	15	27	0							27		
Other					2	0							2		
							2x 3								
(55) Total protein	[g/L]				42							42	42	100	
Sample A		29,9	3	9,9	42		CVP	30,3	0,55	22%	23,6	37	42	42	100
(1) Biuret		29,9	3	10	41	0							41		
Other					1	0							1		
							1x 99								
Sample B		76,8	2,7	3,5	42		CVP	77,9	0,46	18%	63,8	92	42	42	100
(1) Biuret		76,9	2,7	3,5	41	0							41		
Other					1	0							1		
							1x 99								
(49) Ceruloplasmin	[g/L]				18							17	16	94	
Sample A		0,127	0,019	15	18							17	16	94	
(2) Immunoturbidimetry; (58) Beckman Coulter (AU)		0,122	0,002	1,8	5	0	CVPG	0,118	0,01	19%	0,095	0,141	5		
Other					13	0							12		
							3x 2/1, 1x 2/5, 2x 2/12, 3x 2/60, 3x 2/91, 1x 3/149								
Sample B		0,309	0,054	17	18							17	17	100	
(2) Immunoturbidimetry; (58) Beckman Coulter (AU)		0,293	0,019	6,3	5	0	CVPG	0,298	0,015	19%	0,241	0,355	5		
Other					13	0							12		
							3x 2/1, 1x 2/5, 2x 2/12, 3x 2/60, 3x 2/91, 1x 3/149								

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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				
(51) Haptoglobin	[g/L]				15							15	14	93	
Sample A		0,66	0,055	8,3	15		CVP	0,665	0,01	13%	0,578	0,752	15	14	93
(2) Immunoturbidimetry		0,659	0,055	8,3	13	0							13		
Other					2	0							2		
							2x 3								
Sample B		1,75	0,081	4,6	15		CVP	1,76	0,019	13%	1,53	1,99	15	15	100
(2) Immunoturbidimetry		1,75	0,063	3,6	13	0							13		
Other					2	0							2		
							2x 3								
(41) IgA	[g/L]				49							49	49	100	
Sample A		1,04	0,065	6,2	49		CVP	1,05	0,01	14%	0,903	1,2	49	49	100
(2) Immunoturbidimetry		1,05	0,064	6,2	45	0							45		
Other					4	0							4		
							1x 0, 3x 3								
Sample B		3,33	0,14	4,1	49		CVP	3,35	0,026	14%	2,88	3,82	49	49	100
(2) Immunoturbidimetry		3,34	0,13	4	45	0							45		
Other					4	0							4		
							1x 0, 3x 3								
(42) IgG	[g/L]				50							50	49	98	
Sample A		4,77	0,22	4,6	50		CVP	4,85	0,037	13%	4,21	5,49	50	49	98
(2) Immunoturbidimetry		4,79	0,22	4,5	46	0							46		
Other					4	0							4		
							1x 0, 3x 3								
Sample B		17,5	1,1	6,3	50		CVP	17,8	0,14	13%	15,4	20,2	50	50	100
(2) Immunoturbidimetry		17,5	1,1	6,6	46	0							46		
Other					4	0							4		
							1x 0, 3x 3								
(43) IgM	[g/L]				50							50	45	90	
Sample A		0,466	0,047	10	50		CVP	0,484	0,007	18%	0,396	0,572	50	46	92
(2) Immunoturbidimetry		0,464	0,049	11	46	0							46		
Other					4	0							4		
							1x 0, 3x 3								
Sample B		2,8	0,15	5,3	50		CVP	2,84	0,022	18%	2,32	3,36	50	49	98
(2) Immunoturbidimetry		2,8	0,15	5,2	46	0							46		
Other					4	0							4		
							1x 0, 3x 3								
(50) Orosomuroid	[g/L]				11							11	10	91	
Sample A												11	10	91	
(2) Immunoturbidimetry		0,396	0,05	13	11	0	CVP	0,393	0,014	20%	0,314	0,472	11		
Sample B												11	10	91	
(2) Immunoturbidimetry		0,979	0,074	7,5	11	0	CVP	0,991	0,019	20%	0,792	1,19	11		
(48) Prealbumin	[g/L]				12							12	12	100	
Sample A		0,072	0,007	9,8	12		CVP	0,076	0,002	40%	0,045	0,107	12	12	100
(2) Immunoturbidimetry		0,072	0,007	9,8	11	0							11		
Other					1	1							1		
							1x 3								
Sample B		0,175	0,013	7,2	12		CVP	0,179	0,003	17%	0,148	0,21	12	12	100
(2) Immunoturbidimetry		0,177	0,012	6,8	11	0							11		
Other					1	0							1		
							1x 3								
(56) Soluble Transferrin Receptor (sTfR)	[mg/L]				17							12	11	92	
Sample A		0,618	0,19	31	17							12	11	92	
Other					17	0						12			
							1x 2/12, 1x 2/60, 2x 2/999, 4x 4/12, 1x 4/60, 2x 6/60, 3x 6/149, 3x 6/999								
Sample B		1,66	0,43	26	17							12	11	92	
Other					17	0						12			
							1x 2/12, 1x 2/60, 2x 2/999, 4x 4/12, 1x 4/60, 2x 6/60, 3x 6/149, 3x 6/999								
(44) Transferrin	[g/L]				33							33	32	97	
Sample A		1,36	0,046	3,4	33		CVP	1,37	0,006	12%	1,2	1,54	33	32	97
(2) Immunoturbidimetry		1,37	0,044	3,2	31	0							31		
Other					2	0							2		
							2x 3								
Sample B		3,77	0,14	3,6	33		CVP	3,76	0,018	12%	3,3	4,22	33	32	97
(2) Immunoturbidimetry		3,78	0,13	3,4	31	0							31		
Other					2	0							2		
							2x 3								