

EQA round: RF1/25 - Diagnostics of Rheumatoid Arthritis and ASLO

Deadline: 14.3.2025

Setup: groups - R (manufacturer of kit); minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D _{max} = acceptable difference
SD = standard deviation	CVPG = consensus of the participants' groups	LL = lower limit
CV = coefficient of variation	U _{AV} = expanded uncertainty of the assigned value (k = 2)	UL = upper limit
N _{tot} = total number of the results		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			
Set 1														
(277) anti-CCP IgG	[kU/L]				84									0
Sample A1		2,07	2,1	100	84									0
(1) Abbott		0,626	0,16	25	21	0	CVPG 0,626	0,085	33%	0,419	0,833			0
(60) Roche		7,5	0,74	9,9	9	0	CVPG 7,5	0,92	33%	5,02	9,98			0
(87) Euroimmun		0,5	0,74	150	8	0	CVPG 0,5	0,56	33%	0,335	0,665			0
(140) TestLine		5,75	8,2	140	9	3	CVPG 5,75	11	33%	3,85	7,65			0
(166) Thermo Fisher		1,85	0,67	36	8	0	CVPG 1,85	0,51	33%	1,23	2,47			0
(211) INOVA Diagnostics		4,6	0	0	6	1	CVPG 4,6		33%	3,08	6,12			0
(999) another manufacturer		3,8	1	27	5	0	CVPG 3,8	2,9	33%	2,54	5,06			0
Other					18	0								0
							4x 29, 1x 38, 1x 66, 1x 73, 3x 135, 1x 147, 2x 148, 3x 162, 1x 179, 1x 183							
Sample B1		312	160	52	84									0
(1) Abbott		200	0	0	21	6	CVPG 200		33%	134	266			0
(60) Roche		462	56	12	9	0	CVPG 462	70	33%	309	615			0
(87) Euroimmun		106	140	130	8	0	CVPG 106	110	33%	71	141			0
(140) TestLine		800	0	0	9	3	CVPG 800		33%	536	1070			0
(166) Thermo Fisher		340	0	0	8	0	CVPG 340		33%	227	453			0
(211) INOVA Diagnostics		619	0	0	6	5	CVPG 619		33%	414	824			0
(999) another manufacturer		351	72	20	5	2	CVPG 351	81	33%	235	467			0
Other					18	5								0
							4x 29, 1x 38, 1x 66, 1x 73, 3x 135, 1x 147, 2x 148, 3x 162, 1x 179, 1x 183							
(282) anti-MCV IgG	[kU/L]				27									0
Sample A1		5,45	2,6	47	27									0
(135) OrgenTec		5,54	2,2	39	24	0	CVPG 5,54	1,1	33%	3,71	7,37			0
Other					3	0								0
							3x 34							
Sample B1		945	100	11	27									0
(135) OrgenTec		909	160	18	24	2	CVPG 909	86	33%	609	1210			0
Other					3	0								0
							3x 34							
(231) Rheumat. fac. (scr)	[kU/L]				178									0
Sample A1		9,05	5,1	56	178									0
(1) Abbott		19,5	0,87	4,4	38	0	CVPG 19,5	0,35	33%	13	26			0
(12) Beckman Coulter		13,2	10	77	6	1	CVPG 13,2	29	33%	8,84	17,6			0
(58) Beckman Coulter (AU)		6,63	1,9	29	24	0	CVPG 6,63	0,95	33%	4,44	8,82			0
(60) Roche		8,7	1,9	22	54	2	CVPG 8,7	0,65	33%	5,82	11,6			0
(149) Siemens (Dade, BN, Dimension)		9,19	0,64	7	7	0	CVPG 9,19	0,63	33%	6,15	12,3			0
(162) Siemens (Atellica)		5,42	2,9	53	22	0	CVPG 5,42	1,5	33%	3,63	7,21			0
(177) Mindray		7,5	0,74	9,9	5	0	CVPG 7,5	2,1	33%	5,02	9,98			0
(179) Siemens		5,28	1,8	34	7	0	CVPG 5,28	1,8	33%	3,53	7,03			0
Other					15	1								0
							1x 70, 1x 75, 3x 91, 2x 115, 1x 116, 2x 148, 1x 152, 3x 178, 1x 999							
Sample B1		451	37	8,1	178									0
(1) Abbott		462	33	7,1	38	0	CVPG 462	13	33%	309	615			0
(12) Beckman Coulter		467	21	4,4	6	1	CVPG 467	58	33%	312	622			0
(58) Beckman Coulter (AU)		453	32	7,1	24	0	CVPG 453	16	33%	303	603			0
(60) Roche		446	20	4,4	54	2	CVPG 446	6,7	33%	298	594			0
(149) Siemens (Dade, BN, Dimension)		526	50	9,6	7	0	CVPG 526	49	33%	352	700			0
(162) Siemens (Atellica)		455	17	3,8	22	0	CVPG 455	8,9	33%	304	606			0
(177) Mindray		367	47	13	5	0	CVPG 367	130	33%	245	489			0
(179) Siemens		464	29	6,3	7	0	CVPG 464	28	33%	310	618			0
Other					15	1								0
							1x 70, 1x 75, 3x 91, 2x 115, 1x 116, 2x 148, 1x 152, 3x 178, 1x 999							
(234) Rheumat. factor IgA	[kU/L]				46									0
Sample A1		6,85	2,6	39	46									0
(135) OrgenTec		6,03	3,8	63	11	0	CVPG 6,03	2,8	33%	4,04	8,02			0
(140) TestLine		8,41	0,79	9,4	21	3	CVPG 8,41	0,46	33%	5,63	11,2			0
(166) Thermo Fisher		7,45	0,82	11	6	0	CVPG 7,45	1,1	33%	4,99	9,91			0
Other					8	0								0
							2x 147, 4x 148, 1x 179, 1x 211							
Sample B1		353	150	42	46									0
(135) OrgenTec		500	0	0	11	0	CVPG 500		33%	335	665			0
(140) TestLine		322	5,4	1,7	21	3	CVPG 322	3,1	33%	215	429			0

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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				
(166) Thermo Fisher		111	6,7	6	6	0	CVPG	111	9,3	33%	74,3	148	0		
Other					8	0							0		
							2x 147, 4x 148, 1x 179, 1x 211								
(233) Rheumat. factor IgG	[kU/L]				45								0		
Sample A1		9,02	6,3	70	45								0		
(135) OrgenTec		7,59	4,9	64	11	0	CVPG	7,59	3,6	33%	5,08	10,1	0		
(140) TestLine		14,2	1,5	11	21	3	CVPG	14,2	0,89	33%	9,51	18,9	0		
(166) Thermo Fisher		2,3	1,3	58	5	0	CVPG	2,3	3,8	33%	1,54	3,06	0		
Other					8	0							0		
							1x 58, 2x 147, 4x 148, 1x 211								
Sample B1		188	120	63	45								0		
(135) OrgenTec		364	150	40	11	0	CVPG	364	110	33%	243	485	0		
(140) TestLine		147	27	19	21	3	CVPG	147	16	33%	98,4	196	0		
(166) Thermo Fisher		42	1,5	3,5	5	0	CVPG	42	4,2	33%	28,1	55,9	0		
Other					8	0							0		
							1x 58, 2x 147, 4x 148, 1x 211								
(235) Rheumat. factor IgM	[kU/L]				46								0		
Sample A1		3,39	3	87	46								0		
(135) OrgenTec		1,44	1,4	94	11	0	CVPG	1,44	1	33%	0,964	1,92	0		
(140) TestLine		6,08	0,67	11	21	3	CVPG	6,08	0,38	33%	4,07	8,09	0		
(166) Thermo Fisher		0,8	0,15	19	6	0	CVPG	0,8	0,21	33%	0,536	1,07	0		
Other					8	0							0		
							1x 91, 2x 147, 4x 148, 1x 211								
Sample B1		324	86	26	46								0		
(135) OrgenTec		410	110	27	11	0	CVPG	410	81	33%	274	546	0		
(140) TestLine		320	0	0	21	4	CVPG	320		33%	214	426	0		
(166) Thermo Fisher		207	10	5	6	0	CVPG	207	14	33%	138	276	0		
Other					8	0							0		
							1x 91, 2x 147, 4x 148, 1x 211								
Set 2															
(237) anti-streptolysin O (ASLO)	[kU/L]				169								155	154	99
Sample A2		157	20	13	169								155	154	99
(1) Abbott		129	5,3	4,1	40	0	CVPG	129	2	20%	103	155	40		
(58) Beckman Coulter (AU)		165	7,3	4,4	27	0	CVPG	165	3,4	20%	132	198	27		
(60) Roche		165	9,2	5,6	48	0	CVPG	165	3,3	20%	132	198	48		
(91) Binding Site		165	2,4	1,4	5	0	CVPG	165	6,7	20%	132	198	5		
(149) Siemens (Dade, BN, Dimension)		161	6,7	4,2	6	0	CVPG	161	9,3	20%	128	194	6		
(162) Siemens (Atellica)		170	6,2	3,6	22	0	CVPG	170	3,2	20%	136	204	22		
(179) Siemens		170	9,1	5,4	7	0	CVPG	170	8,9	20%	136	204	7		
Other					14	0							0		
							3x 12, 3x 115, 4x 177, 3x 178, 1x 999								
Sample B2		313	56	18	169								155	155	100
(1) Abbott		234	8,3	3,5	40	0	CVPG	234	3,2	20%	187	281	40		
(58) Beckman Coulter (AU)		326	8,4	2,6	27	0	CVPG	326	4	20%	260	392	27		
(60) Roche		348	19	5,4	48	0	CVPG	348	6,6	20%	278	418	48		
(91) Binding Site		323	3,7	1,1	5	0	CVPG	323	10	20%	258	388	5		
(149) Siemens (Dade, BN, Dimension)		323	19	5,7	6	0	CVPG	323	26	20%	258	388	6		
(162) Siemens (Atellica)		351	20	5,8	22	0	CVPG	351	11	20%	280	422	22		
(179) Siemens		366	9,6	2,6	7	0	CVPG	366	9,4	20%	292	440	7		
Other					14	0							0		
							3x 12, 3x 115, 4x 177, 3x 178, 1x 999								