

EQA round: T05/23 - Blood count - new parameters (study)

Deadline: 19.5.2023

Setup: groups - manufacturer of instrument; 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				
(120) Reticulocyte count	[·10 ⁹ /L]				48							48	44	92	
Sample A		100	17	17	48		CVP	100	6,1	45%	55	145	48	48	100
(63) Sysmex		94,1	7,8	8,3	26	0							26		
(177) Mindray		118	10	8,7	12	0							12		
(179) Siemens		118	6,7	5,7	5	0							5		
Other					5	0							5		
							1x 1, 4x 12								
Sample B		90,3	20	23	48		CVP	90,3	7,2	45%	49,6	131	48	44	92
(63) Sysmex		96,4	9,2	9,6	26	0							26		
(177) Mindray		74,3	10	13	12	0							12		
(179) Siemens		151	12	8,1	5	0							5		
Other					5	0							5		
							1x 1, 4x 12								
(126) Immature reticulocyte fraction	[%]				38							38	33	87	
Sample A		12,4	2,3	19	38		CVP	12,4	0,93	45%	6,82	18	38	34	89
(63) Sysmex		11,7	1,5	13	23	0							23		
(177) Mindray		13	2,8	22	10	0							10		
Other					5	0							5		
							1x 1, 3x 12, 1x 179								
Sample B		7,81	2,2	28	38		CVP	7,81	0,87	45%	4,29	11,4	38	33	87
(63) Sysmex		6,99	1,4	20	23	0							23		
(177) Mindray		8,62	2,8	32	10	0							10		
Other					5	0							5		
							1x 1, 3x 12, 1x 179								
(127) Mean reticulocyte volume	[fL]				8							8	7	88	
Sample A					8							8	7	88	
Other					8	1						8			
							4x 12, 1x 63, 3x 179								
Sample B					8							8	7	88	
Other					8	1						8			
							4x 12, 1x 63, 3x 179								
(128) Mean amount of hemoglobin in reticulocytes	[pg]				40							40	34	85	
Sample A		34,6	2,5	7,3	40		CVP	34,6	0,98	10%	31,1	38,1	40	34	85
(63) Sysmex		36,1	0,82	2,3	24	0							24		
(177) Mindray		30,6	2,4	7,7	11	0							11		
Other					5	0							5		
							1x 1, 4x 179								
Sample B		32,4	2,2	6,7	40		CVP	32,4	0,85	10%	29,1	35,7	40	35	88
(63) Sysmex		33,6	0,77	2,3	24	0							24		
(177) Mindray		29	2,1	7,1	11	0							11		
Other					5	0							5		
							1x 1, 4x 179								
(129) Immature platelet fraction	[%]				24							23	19	83	
Sample A		5,07	2,7	53	24							23	20	87	
(63) Sysmex		7,65	0,37	4,8	9	0	CVPG	7,65	0,46	40%	4,59	10,8	9		
(177) Mindray		3,25	1,1	33	14	0	CVPG	3,25	0,71	40%	1,95	4,55	14		
Other					1	0							0		
							1x 1								
Sample B		4,14	3,7	89	24							23	20	87	
(63) Sysmex		7,55	1,1	15	9	0	CVPG	7,55	1,4	40%	4,53	10,6	9		
(177) Mindray		1,47	0,5	34	14	0	CVPG	1,47	0,32	40%	0,882	2,06	14		
Other					1	0							0		
							1x 1								