

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

Deadline: 19.5.2023

Setup: groups - measuring system; 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
(737) Siemens Advia 120, 2120, 2120i		118	6,7	5,7	5	0							5		
(771) MINDRAY BC 6xxx series		119	11	8,9	11	0							11		
(772) Sysmex XN series		94,7	7,2	7,6	25	0							25		
Other					7	0							7		
							1x 749, 1x 763, 1x 766, 4x 773								
Sample B		90,3	20	23	48		CVP	90,3	7,2	45%	49,6	131	48	44	92
(737) Siemens Advia 120, 2120, 2120i		151	12	8,1	5	0							5		
(771) MINDRAY BC 6xxx series		74,5	11	14	11	0							11		
(772) Sysmex XN series		97	8,5	8,7	25	0							25		
Other					7	0							7		
							1x 749, 1x 763, 1x 766, 4x 773								
(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
(771) MINDRAY BC 6xxx series		13,3	2,4	18	9	0							9		
(772) Sysmex XN series		11,8	1,4	12	22	0							22		
Other					7	0							7		
							1x 737, 1x 749, 1x 763, 1x 766, 3x 773								
Sample B		7,81	2,2	28	38		CVP	7,81	0,87	45%	4,29	11,4	38	33	87
(771) MINDRAY BC 6xxx series		8,8	2,4	27	9	0							9		
(772) Sysmex XN series		7,09	1,3	18	22	0							22		
Other					7	0							7		
							1x 737, 1x 749, 1x 763, 1x 766, 3x 773								
(127) Mean reticulocyte volume	[fL]				8							8	7	88	
Sample A					8	1						8	7	88	
Other					8	1						8			
							3x 737, 1x 772, 4x 773								
Sample B					8	1						8	7	88	
Other					8	1						8			
							3x 737, 1x 772, 4x 773								
(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
(771) MINDRAY BC 6xxx series		30,6	2,5	8,1	10	0							10		
(772) Sysmex XN series		36,2	0,84	2,3	23	0							23		
Other					7	0							7		
							4x 737, 1x 749, 1x 763, 1x 766								
Sample B		32,4	2,2	6,7	40		CVP	32,4	0,85	10%	29,1	35,7	40	35	88
(771) MINDRAY BC 6xxx series		29,1	2,2	7,4	10	0							10		
(772) Sysmex XN series		33,7	0,77	2,3	23	0							23		
Other					7	0							7		
							4x 737, 1x 749, 1x 763, 1x 766								
(129) Immature platelet fraction	[%]				24							23	19	83	
Sample A		5,07	2,7	53	24							23	20	87	
(63) Sysmex; (772) Sysmex XN series		7,65	0,37	4,8	9	0	CVPG	7,65	0,46	40%	4,59	10,8	9		
(177) Mindray; (771) MINDRAY BC 6xxx series		3,2	1	31	11	0	CVPG	3,25	0,71	40%	1,95	4,55	11		
Other					4	0							3		
							1x 1/763, 1x 177/766, 2x 177/999								
Sample B		4,14	3,7	89	24							23	20	87	
(63) Sysmex; (772) Sysmex XN series		7,55	1,1	15	9	0	CVPG	7,55	1,4	40%	4,53	10,6	9		
(177) Mindray; (771) MINDRAY BC 6xxx series		1,35	0,32	24	11	0	CVPG	1,47	0,32	40%	0,882	2,06	11		
Other					4	0							3		
							1x 1/763, 1x 177/766, 2x 177/999								