

EQA round: RET1/26 - Reticulocytes

Deadline: 24.4.2026

Setup: groups - S (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 (analyser)	[·10 ⁹ /L]				209							209	203	97	
Sample A		55	6,7	12	209		CVP	55	1,1	40%	33	77	209	204	98
(771) MINDRAY BC 6xxx, 7xx series		55,3	6,5	12	46	0							46		
(772) Sysmex XN, XR series		56,7	4,6	8,1	134	0							134		
(773) Beckman Coulter DxH 600/800/900, HMX series, LH series		39	5,9	15	20	0							20		
Other					9	0							9		
							1x 737, 4x 763, 2x 765, 2x 999								
Sample B		57,6	7,3	13	209		CVP	57,6	1,2	40%	34,5	80,7	209	205	98
(771) MINDRAY BC 6xxx, 7xx series		54,3	5,8	11	46	0							46		
(772) Sysmex XN, XR series		60,5	5	8,3	134	0							134		
(773) Beckman Coulter DxH 600/800/900, HMX series, LH series		41,8	7,4	18	20	0							20		
Other					9	0							9		
							1x 737, 4x 763, 2x 765, 2x 999								
(138) Reticulocyte count (microscope)	[·10 ⁹ /L]				39								39	32	82
Sample A													39	32	82
(0) not specified		52,5	17	33	39	0	CVP	52,5	6,7	45%	28,8	76,2	39		
Sample B													39	36	92
(0) not specified		56,3	15	27	39	0	CVP	56,3	6	45%	30,9	81,7	39		
(126) Immature reticulocyte fraction	[%]				146								142	133	94
Sample A		7,04	2,1	31	146								142	136	96
(12) Beckman Coulter; (773) Beckman Coulter DxH 600/800/900, HMX series, LH series		30,5	1,9	6,3	11	0	CVPG	30,5	1,4	45%	16,7	44,3	11		
(63) Sysmex; (772) Sysmex XN, XR series		6,39	1,6	25	99	0	CVPG	6,39	0,39	45%	3,51	9,27	99		
(177) Mindray; (771) MINDRAY BC 6xxx, 7xx series		8,37	2,3	28	32	0	CVPG	8,37	1	45%	4,6	12,2	32		
Other					4	0							0		
							2x 1/763, 1x 46/999, 1x 999/999								
Sample B		7,76	2,2	28	146								142	136	96
(12) Beckman Coulter; (773) Beckman Coulter DxH 600/800/900, HMX series, LH series		32,7	2,7	8,3	11	0	CVPG	32,7	2	45%	17,9	47,5	11		
(63) Sysmex; (772) Sysmex XN, XR series		7,04	1,4	20	99	0	CVPG	7,04	0,35	45%	3,87	10,3	99		
(177) Mindray; (771) MINDRAY BC 6xxx, 7xx series		9,28	2,6	28	32	0	CVPG	9,28	1,1	45%	5,1	13,5	32		
Other					4	0							0		
							2x 1/763, 1x 46/999, 1x 999/999								
(128) Mean amount of hemoglobin in reticulocytes	[pg]				146								141	134	95
Sample A		33,5	1,9	5,6	146								141	134	95
(63) Sysmex; (772) Sysmex XN, XR series		34,3	1	3	109	0	CVPG	34,3	0,24	10%	30,8	37,8	109		
(177) Mindray; (771) MINDRAY BC 6xxx, 7xx series		29,5	2	6,7	32	0	CVPG	29,5	0,85	10%	26,5	32,5	32		
Other					5	0							0		
							2x 1/763, 1x 46/999, 1x 179/737, 1x 999/999								
Sample B		32,9	1,9	5,7	146								141	137	97
(63) Sysmex; (772) Sysmex XN, XR series		33,6	0,93	2,8	109	0	CVPG	33,6	0,22	10%	30,2	37	109		
(177) Mindray; (771) MINDRAY BC 6xxx, 7xx series		28,3	1,8	6,5	32	0	CVPG	28,3	0,8	10%	25,4	31,2	32		
Other					5	0							0		
							2x 1/763, 1x 46/999, 1x 179/737, 1x 999/999								
(127) Mean reticulocyte volume	[fL]				35								35	30	86
Sample A		109	6,8	6,2	35		CVP	109	2,8	10%	98,1	120	35	30	86
(771) MINDRAY BC 6xxx, 7xx series		105	7,9	7,5	18	0							18		
(773) Beckman Coulter DxH 600/800/900, HMX series, LH series		112	3,3	3	15	0							15		
Other					2	0							2		
							1x 737, 1x 999								
Sample B		103	5,3	5,2	35		CVP	103	2,2	10%	92,7	114	35	32	91
(771) MINDRAY BC 6xxx, 7xx series		101	6,8	6,8	18	0							18		
(773) Beckman Coulter DxH 600/800/900, HMX series, LH series		104	2,6	2,5	15	0							15		
Other					2	0							2		
							1x 737, 1x 999								