

## EQA round: RET1/26 - Reticulocytes

Deadline: 24.4.2026

Setup: groups - P (manufacturer of instrument); minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D <sub>max</sub> = 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 <sub>tot</sub> = total number of the results	U <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)	N <sub>eva</sub> = number of the results assessed
N <sub>out</sub> = number of the results removed before calculation		N <sub>suc</sub> = number of successful results
		S <sub>rel</sub> = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability					N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL				
<b>(120) Reticulocyte count (analyser)</b>	[·10 <sup>9</sup> /L]				209							209	203	97	
<b>Sample A</b>		55	6,7	12	209		CVP	55	1,1	40%	33	77	209	204	98
(1) Abbott		45	13	30	6	0							6		
(12) Beckman Coulter		39	5,9	15	20	0							20		
(63) Sysmex		56,7	4,6	8,1	134	0							134		
(177) Mindray		55,3	6,5	12	46	0							46		
Other					3	0							3		
								1x 46, 1x 179, 1x 999							
<b>Sample B</b>		57,6	7,3	13	209		CVP	57,6	1,2	40%	34,5	80,7	209	205	98
(1) Abbott		44	25	57	6	0							6		
(12) Beckman Coulter		41,8	7,4	18	20	0							20		
(63) Sysmex		60,5	5	8,3	134	0							134		
(177) Mindray		54,3	5,8	11	46	0							46		
Other					3	0							3		
								1x 46, 1x 179, 1x 999							
<b>(138) Reticulocyte count (microscope)</b>	[·10 <sup>9</sup> /L]				39								39	32	82
<b>Sample A</b>													39	32	82
(0) not specified		52,5	17	33	39	0	CVP	52,5	6,7	45%	28,8	76,2	39		
<b>Sample B</b>													39	36	92
(0) not specified		56,3	15	27	39	0	CVP	56,3	6	45%	30,9	81,7	39		
<b>(126) Immature reticulocyte fraction</b>	[%]				146								142	133	94
<b>Sample A</b>		7,04	2,1	31	146								142	136	96
(12) Beckman Coulter		30,5	1,9	6,3	11	0	CVPG	30,5	1,4	45%	16,7	44,3	11		
(63) Sysmex		6,39	1,6	25	99	0	CVPG	6,39	0,39	45%	3,51	9,27	99		
(177) Mindray		8,37	2,3	28	32	0	CVPG	8,37	1	45%	4,6	12,2	32		
Other					4	0							0		
								2x 1, 1x 46, 1x 999							
<b>Sample B</b>		7,76	2,2	28	146								142	136	96
(12) Beckman Coulter		32,7	2,7	8,3	11	0	CVPG	32,7	2	45%	17,9	47,5	11		
(63) Sysmex		7,04	1,4	20	99	0	CVPG	7,04	0,35	45%	3,87	10,3	99		
(177) Mindray		9,28	2,6	28	32	0	CVPG	9,28	1,1	45%	5,1	13,5	32		
Other					4	0							0		
								2x 1, 1x 46, 1x 999							
<b>(128) Mean amount of hemoglobin in reticulocytes</b>	[pg]				146								141	134	95
<b>Sample A</b>		33,5	1,9	5,6	146								141	134	95
(63) Sysmex		34,3	1	3	109	0	CVPG	34,3	0,24	10%	30,8	37,8	109		
(177) Mindray		29,5	2	6,7	32	0	CVPG	29,5	0,85	10%	26,5	32,5	32		
Other					5	0							0		
								2x 1, 1x 46, 1x 179, 1x 999							
<b>Sample B</b>		32,9	1,9	5,7	146								141	137	97
(63) Sysmex		33,6	0,93	2,8	109	0	CVPG	33,6	0,22	10%	30,2	37	109		
(177) Mindray		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, 1x 46, 1x 179, 1x 999							
<b>(127) Mean reticulocyte volume</b>	[fL]				35								35	30	86
<b>Sample A</b>		109	6,8	6,2	35		CVP	109	2,8	10%	98,1	120	35	30	86
(12) Beckman Coulter		112	3,3	3	15	0							15		
(177) Mindray		105	7,9	7,5	18	0							18		
Other					2	0							2		
								1x 46, 1x 179							
<b>Sample B</b>		103	5,3	5,2	35		CVP	103	2,2	10%	92,7	114	35	32	91
(12) Beckman Coulter		104	2,6	2,5	15	0							15		
(177) Mindray		101	6,8	6,8	18	0							18		
Other					2	0							2		
								1x 46, 1x 179							