

Setup: all data

AV = assigned value

CVE = consensus of the experts

>>> ... expected result

> ... acceptable result

± ... result not assessed

N_{tot} = total number of the resultsN_{rel} = relative number of the resultsN_{eva} = number of the results assessedN_{suc} = number of successful resultsS_{rel} = relative success

Sample Test Group	Frequency of the results				Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]

Sample A**(921) WBC - morphology**

All results		8	5,6	Agranulation			
		2	1,4	Neutrophil hypersegmentation			
		1	0,7	Atypical/reactive/pathological monocytes/promono.			
CVE >>>	144	100		Denuded nuclei/cells, nuclear shadows / smudge cells			
		1	0,7	Cytoplasmatic fragments			
		6	4,2	Vacuolisation			
		6	4,2	LGL/big lymphocytes			
		19	13	Lymphocytes - reactive forms			
		3	2,1	"Hairy" lymphocytes			
CVE >>>	135	94		Lymphocytes - atypical forms (except "hairy")			

(922) WBC - count changes (relative)

All results	CVE >>>	142	99	Neutropenia			
	CVE >>>	144	100	Lymphocytosis			
	CVE >>>	110	76	Monocytopenia			
		5	3,5	Left shift			

(923) RBC - morphology

All results		22	15	No changes			
	CVE >>>	80	56	Normocytosis			
		1	0,7	Microcytosis			
		3	2,1	Anisocytosis			
		6	4,2	Poikilocytosis			
CVE >>>	62	43		Eliptocytes, ovalocytes			
		22	15	Spherocytes			
		6	4,2	Stomatocytes			
		1	0,7	Drepanocytes			
		6	4,2	Dacryocytes			
		3	2,1	Acanthocytes			
		7	4,9	Echinocytes			
		2	1,4	Target cells			
		4	2,8	Schistocytes (and other fragmentocytes)			
		2	1,4	Polychromasia			
CVE >>>	95	66		Hypochromia			
		2	1,4	Howell-Jolly bodies			
		1	0,7	Rouleaux formation			

(924) Platelets - morphology

All results		1	0,7	Not specified			
	CVE >>>	107	74	No changes			
		15	10	Large platelets			
		12	8,3	Small platelets			
		21	15	Platelets hypogranulation			

(925) Clinical recommendation - smear assessment

All results	CVE >>>	144	100	Blood smear is pathological			
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(926) Clinical recommendation - examination

All results	CVE >>>	144	100	An examination by the specialist/haematologist is recommended			
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(927) Estimation of diagnosis

All results		3	2,1	Anemia: Normocytosis			
		3	2,1	Anemia: Hypochromia			
		3	2,1	Acute leukemia: Without closer determination			
		1	0,7	Acute leukemia: ALL (acute lymphoblastic leukemia)			
		1	0,7	Myelodysplastic syndrome: Myelodysplastic syndrome			
		2	1,4	Chronic myeloproliferative disease: Exact determination impossible			
		17	12	Mature lymphocytic cells neoplasms: Exact determination impossible			
CVE >>>	126	89		Mature lymphocytic cells neoplasms: CLL (chronic lymphocytic leukaemia)			
		7	4,9	Mature lymphocytic cells neoplasms: PLL (prolymphocytic leukaemia)			
		6	4,2	Platelets disorders: Thrombocytopenia			
		1	0,7	Other: Other disease			

EQA round: DIF1/23 - Peripheral Blood Morphology Evaluation

Deadline: 17.3.2023

Setup: all data

Sample Test Group	Frequency of the results			Success			
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
(928) How do you rate the technical quality of the smear?		142			0		
All results	±	142	100	Acceptable			
(929) How do you rate the staining of the smear?		140			0		
All results	±	139	99	Acceptable			
	±	1	0,7	Not acceptable (give a reason)			
(939) Overall assessment		144			144	142	99
Maximum score achievable: 105 points				Criterion (60 % out of the maximum): 63 points			
Minimum score achieved: 56 points (53,3 %)							
Maximum score achieved: 105 points (100 %)							
All results		2	1,4	Unacceptable result			
	>>>	142	99	Correct result			

Sample B

(921) WBC - morphology

All results		1	0,7	Not specified
		1	0,7	No changes
		20	14	Agranulation
		3	2,1	Neutrophil hypersegmentation
		3	2,1	Hyosegmentation / asegmentation / pelgeroid
		1	0,7	Auer rods
	>	57	40	Atypical/reactive/pathological monocytes/promono.
CVE >>>		124	86	Denuded nuclei/cells, nuclear shadows / smudge cells
		4	2,8	Cytoplasmatic fragments
CVE >>>		66	46	Vacuolisation
		14	9,7	LGL/big lymphocytes
		10	6,9	Lymphocytes - reactive forms
		15	10	Lymphocytes - atypical forms (except "hairy")
		2	1,4	Nucleus fragments of neutrophiles
		5	3,5	Abnormal/leukemic promyelocytes

(922) WBC - count changes (relative)

All results	CVE >>>	137	95	Neutropenia
		8	5,6	Lymphocytosis
		9	6,3	Lymphocytopenia
		14	9,7	Monocytosis
	>	69	48	Monocytopenia
CVE >>>		84	58	Left shift

(923) RBC - morphology

All results		2	1,4	Normocytosis
	CVE >>>	101	70	Microcytosis
		1	0,7	Macrocytosis
	CVE >>>	139	97	Anisocytosis
		4	2,8	Poikilocytosis
		2	1,4	Eliptocytes, ovalocytes
	>	50	35	Spherocytes
		24	17	Stomatocytes
		5	3,5	Dacryocytes
		1	0,7	Acanthocytes
		5	3,5	Schistocytes (and other fragmentocytes)
		12	8,3	Polychromasia
	CVE >>>	54	38	Hypochromia
		1	0,7	Basophilic stippling
		2	1,4	Howell-Jolly bodies
		5	3,5	Rouleaux formation
		1	0,7	RBC agglutination

(924) Platelets - morphology

All results		1	0,7	Not specified
	>	67	47	No changes
	>	43	30	Large platelets
		12	8,3	Small platelets
		17	12	Platelet aggregates
	>	34	24	Platelets hypogranulation
		1	0,7	Megakaryocytic nucleus fragments

(925) Clinical recommendation - smear assessment

All results	CVE >>>	143	99	Blood smear is pathological
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EQA round: DIF1/23 - Peripheral Blood Morphology Evaluation

Deadline: 17.3.2023

Setup: all data

Sample Test Group				Frequency of the results	Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
			1	0,7	Blood smear within physiological limits or with reactive changes		
(926) Clinical recommendation - examination							
All results	CVE >>>	143	99	0,7	An examination by the specialist/haematologist is recommended		
			1	0,7	An examination by the specialist/haematologist is not necessary		
(927) Estimation of diagnosis							
All results			1	0,7	Anemia: Normocytosis		
			1	0,7	Anemia: Microcytosis		
			1	0,7	Anemia: Hypochromia		
	>	69	49	0,7	Acute leukemia: Without closer determination		
			3	2,1	Acute leukemia: ALL (acute lymphoblastic leukemia)		
	CVE >>>	78	55	0,7	Acute leukemia: AML (acute myeloid leukemia)		
			2	1,4	Myelodysplastic syndrome: Myelodysplastic syndrome		
			1	0,7	Chronic myeloproliferative disease: Exact determination impossible		
			2	1,4	Mature lymphocytic cells neoplasms: Exact determination impossible		
			2	1,4	Mature lymphocytic cells neoplasms: CLL (chronic lymphocytic leukaemia)		
			1	0,7	Mature lymphocytic cells neoplasms: PLL (prolymphocytic leukaemia)		
			10	7	Platelets disorders: Thrombocytopenia		
			3	2,1	Other: Viral infection incl. inf. mononucleosis		
			1	0,7	Other: Other reactive changes		
(928) How do you rate the technical quality of the smear?							
		142			0		
All results	±	142	100	Acceptable			
(929) How do you rate the staining of the smear?							
		140			0		
All results	±	137	98	Acceptable			
	±	3	2,1	Not acceptable (give a reason)			
(939) Overall assessment							
		144			144	135	94
Maximum score achievable: 93 points Criterion (60 % out of the maximum): 56 points							
Minimum score achieved: 31 points (33,3 %)							
Maximum score achieved: 93 points (100 %)							
All results			9	6,3	Unacceptable result		
	>>>	135	94	Correct result			

Summary for all samples

(939) Overall assessment		144			144	134	93
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