

## EQA round: DIF2/26 - Peripheral Blood Morphology Evaluation

Deadline: 22.5.2026

Setup: Slovakia

AV = assigned value

CVE = consensus of the experts

&gt;&gt;&gt; ... expected result

&gt; ... acceptable result

± ... result not assessed

N<sub>tot</sub> = total number of the resultsN<sub>rel</sub> = relative number of the resultsN<sub>eva</sub> = number of the results assessedN<sub>suc</sub> = number of successful resultsS<sub>rel</sub> = relative success

Sample Test Group	Frequency of the results				Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]

## Sample A

## (921) WBC - morphology

All results			2	13	Hypergranulation/toxic granulation		
	CVE >>>		3	20	Agranulation		
			1	6,7	Neutrophil hypersegmentation		
			2	13	Hyposegmentation / asegmentation / pelgeroid		
	>		4	27	Auer rods		
	>		1	6,7	Döhle bodies		
	CVE >>>		7	47	Atypical/reactive/pathological monocytes/promono.		
	CVE >>>		10	67	Denuded nuclei/cells, nuclear shadows / smudge cells		
	CVE >>>		11	73	Vacuolisation		
			2	13	LGL/big lymphocytes		
			2	13	Lymphocytes - reactive forms		
			1	6,7	"Hairy" lymphocytes		
			3	20	Lymphocytes - atypical forms (except "hairy")		
			5	33	Abnormal/leukemic promyelocytes		
	CVE >>>		11	73	Pathological blasts		

## (922) WBC - count changes (relative)

All results			1	6,7	Not specified		
	CVE >>>		12	80	Neutropenia		
			1	6,7	Neutrophilia		
			2	13	Lymphocytosis		
	>		3	20	Lymphocytopenia		
	CVE >>>		9	60	Monocytosis		
	CVE >>>		8	53	Left shift		

## (923) RBC - morphology

All results			9	60	Macrocytosis		
	CVE >>>		12	80	Anisocytosis		
			2	13	Poikilocytosis		
	CVE >>>		8	53	Eliptocytes, ovalocytes		
			2	13	Spherocytes		
			5	33	Dacryocytes		
			1	6,7	Acanthocytes		
	>		1	6,7	Echinocytes		
	CVE >>>		6	40	Target cells		
	CVE >>>		9	60	Schistocytes (and other fragmentocytes)		
	CVE >>>		4	27	Polychromasia		
			2	13	Hypochromia		
	>		3	20	Basophilic stippling		
			2	13	Howell-Jolly bodies		

## (924) Platelets - morphology

All results			1	6,7	Not specified		
	>		10	67	No changes		
	>		4	27	Large platelets		
			2	13	Small platelets		

## (925) Clinical recommendation - smear assessment

All results	CVE >>>		15	100	Blood smear is pathological		
-------------	---------	--	----	-----	-----------------------------	--	--

## (926) Clinical recommendation - examination

All results	CVE >>>		15	100	An examination by the specialist/haematologist is recommended		
-------------	---------	--	----	-----	---	--	--

## (927) Estimation of diagnosis

All results			2	14	Anemia: Macrocytosis		
	>		5	36	Acute leukemia: Without closer determination		
	CVE >>>		10	71	Acute leukemia: AML (acute myeloid leukemia)		
			1	7,1	Myelodysplastic syndrome: Myelodysplastic syndrome		

## (928) How do you rate the technical quality of the smear?

All results	±		14	93	Acceptable		0
	±		1	6,7	Not acceptable (give a reason)		

## (929) How do you rate the staining of the smear?

All results	±		9	60	Acceptable		0
	±		6	40	Not acceptable (give a reason)		

Setup: Slovakia

Sample Test Group	Frequency of the results			Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> Result [%]	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
(939) <b>Overall assessment (score)</b>		15		15	7	47
Maximum score achievable: 135 points			Criterion (60 % out of the maximum): 81 points			
Minimum score achieved: 50 points (37 %)						
Maximum score achieved: 120 points (88,9 %)						
All results		8	53			Unacceptable result
	>>>	7	47			Satisfactory result

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

All results		1	6,7	Not specified
		2	13	No changes
		1	6,7	Hypergranulation/toxic granulation
		1	6,7	Giant bands and metamyelocytes
	>	3	20	Agranulation
		2	13	Neutrophil hypersegmentation
		1	6,7	Döhle bodies
	CVE >>>	4	27	Denuded nuclei/cells, nuclear shadows / smudge cells
		1	6,7	Cytoplasmatic fragments
	>	1	6,7	Vacuolisation
		2	13	Lymphocytes - atypical forms (except "hairy")
	CVE >>>	7	47	Pathological blasts

**(922) WBC - count changes (relative)**

All results		1	6,7	Not specified
	>	6	40	Neutrophilia
	CVE >>>	8	53	Lymphocytopenia
	CVE >>>	9	60	Basophilia
		1	6,7	Monocytosis
	CVE >>>	13	87	Left shift

**(923) RBC - morphology**

All results		1	6,7	Normocytosis
	CVE >>>	12	80	Anisocytosis
	>	8	53	Poikilocytosis
	CVE >>>	7	47	Elliptocytes, ovalocytes
		2	13	Spherocytes
		1	6,7	Stomatocytes
	CVE >>>	15	100	Dacryocytes
		1	6,7	Echinocytes
		2	13	Target cells
	>	2	13	Schistocytes (and other fragmentocytes)
	CVE >>>	9	60	Polychromasia
	CVE >>>	3	20	Hypochromia
	CVE >>>	1	6,7	Basophilic stippling

**(924) Platelets - morphology**

All results	CVE >>>	14	93	Large platelets
		1	6,7	Small platelets
		1	6,7	Platelet aggregates
	CVE >>>	3	20	Platelets hypogranulation
	CVE >>>	2	13	Megakaryocytic nucleus fragments

**(925) Clinical recommendation - smear assessment**

All results	CVE >>>	15	100	Blood smear is pathological
-------------	---------	----	-----	-----------------------------

**(926) Clinical recommendation - examination**

All results	CVE >>>	15	100	An examination by the specialist/haematologist is recommended
-------------	---------	----	-----	---

**(927) Estimation of diagnosis**

All results		2	14	Anemia: Normocytosis
	CVE >>>	2	14	Chronic myeloproliferative disease: Exact determination impossible
		2	14	Chronic myeloproliferative disease: CML (chronic myelogenous leukaemia)
	CVE >>>	13	93	Chronic myeloproliferative disease: Myelofibrosis
		1	7,1	Chronic myeloproliferative disease: Essential thrombocythemia

**(928) How do you rate the technical quality of the smear?**

All results		±	14	93	Acceptable
		±	1	6,7	Not acceptable (give a reason)

## EQA round: DIF2/26 - Peripheral Blood Morphology Evaluation

Deadline: 22.5.2026

Setup: Slovakia

Sample Test Group	Frequency of the results			Success			
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
(929) <b>How do you rate the staining of the smear?</b>		15			0		
All results	±	13	87	Acceptable			
	±	2	13	Not acceptable (give a reason)			
(939) <b>Overall assessment (score)</b>		15			15	9	60
Maximum score achievable: 135 points				Criterion (60 % out of the maximum): 81 points			
Minimum score achieved: 57 points (42,2 %)							
Maximum score achieved: 106 points (78,5 %)							
All results		6	40	Unacceptable result			
	>>>	9	60	Satisfactory result			

**Summary for all samples**

(939) <b>Overall assessment (score)</b>		15			15	5	33
---	--	----	--	--	----	---	----