

SUMMARY STATISTICS

Filter: Slovakia

EQA round: DIF2/21 - Peripheral Blood Morphology Evaluation

Deadline (EQA round closed): 28.05.2021

Key:	ELG ... expert laboratories group	> ... possible result (found by ELG, but consensus not reached)
	AV, >>> ... assigned value type CVE (consensus of ELG)	
	RAR ... range of acceptable results	
	RoM ... robust average of all results	

	Sample A			Sample B		
	AV	RAR	RoM	AV	RAR	RoM
WBC - differential count						
Blasts	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Promyelocytes	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Neutrophil myelocytes	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Neutrophil metamyelocytes	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Neutrophil bars	0,001	0,000 - 0,018	0,003	0,002	0,000 - 0,018	0,004
Segmented neutrophil granulocytes	0,555	0,483 - 0,625	0,579	0,575	0,503 - 0,644	0,584
Eosinophils - immature forms	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Eosinophil segmented granulocytes	0,069	0,039 - 0,115	0,060	0,016	0,003 - 0,043	0,018
Basophilic granulocytes	0,011	0,001 - 0,036	0,011	0,007	0,000 - 0,028	0,007
Monocytes	0,066	0,035 - 0,109	0,067	0,064	0,035 - 0,109	0,059
Lymphocytes	0,298	0,237 - 0,369	0,278	0,331	0,265 - 0,400	0,326
Plasma cells	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Erythroblasts (number)	0	0,000 - 2,000	0,000	0	0,000 - 3,000	0,002

Sample A

Sample B

WBC - morphology

1	No changes	6,7 %	>>>	5	No changes	33 %
1	Hypergranulation/toxic granulation	6,7 %		1	Döhle bodies	6,7 %
1	Agranulation	6,7 %		2	Denuded nuclei/cells, nuclear shadows / smudge cells	13 %
>	10	Hypersegmented granulocytes	67 %	2	Vacuolisation	13 %
1	Atypical/reactive/pathological monocytes/promono.	6,7 %		3	LGL/big lymphocytes	20 %
2	Denuded nuclei/cells, nuclear shadows / smudge cells	13 %	>	6	Lymphocytes - reactive forms	40 %
>>>	6	Vacuolisation	40 %			
5	Lymphocytes - reactive forms	33 %				
1	Lymphocytes - atypical forms (except "hairy")	6,7 %				

WBC - relative changes of count

>	4	Normal count	27 %	>>>	14	Normal count	93 %
1	Neutrophilia	6,7 %		2	Left shift	13 %	
1	Lymphocytopenia	6,7 %					
>	12	Eosinophilia	80 %				
>	2	Basophilia	13 %				
2	Left shift	13 %					

RBC - morphology

>>>	9	No changes	60 %	>>>	13	Microcytosis	87 %
10	Normocytosis	67 %		>>>	13	Anisocytosis	87 %
1	Anisocytosis	6,7 %		6	Poikilocytosis	40 %	
1	Poikilocytosis	6,7 %	>>>	11	Eliptocytes, ovalocytes	73 %	
4	Eliptocytes, ovalocytes	27 %		4	Stomatocytes	27 %	
1	Spherocytes	6,7 %		1	Drepanocytes	6,7 %	
4	Stomatocytes	27 %	>>>	11	Dacryocytes	73 %	
2	Dacryocytes	13 %		1	Acanthocytes	6,7 %	
1	Acanthocytes	6,7 %		2	Echinocytes	13 %	
2	Echinocytes	13 %	>>>	11	Target cells	73 %	
1	Target cells	6,7 %	>	3	Schistocytes (and other fragmentocytes)	20 %	
1	Schistocytes (and other fragmentocytes)	6,7 %	>>>	5	Polychromasia	33 %	
1	Hypochromia	6,7 %	>>>	13	Hypochromia	87 %	
1	Basophilic stippling	6,7 %	>>>	13	Basophilic stippling	87 %	
1	Rouleaux formation	6,7 %		4	Rouleaux formation	27 %	

Sample A

Sample B

Platelets - morphology

1	No changes	6,7 %	>	6	No changes	40 %	
>>>	14	Large platelets	93 %	>	8	Large platelets	53 %
1	Small platelets	6,7 %		1	Small platelets	6,7 %	
1	Platelet aggregates	6,7 %		2	Platelets hypogranulation	13 %	
>	5	Platelets hypogranulation	33 %				

Clinical recommendation - smear

>>>	12	Blood smear is pathological	80 %	>>>	12	Blood smear is pathological	80 %
	3	Blood smear within physiological limits or with reactive changes	20 %		3	Blood smear within physiological limits or with reactive changes	20 %

Clinical recommendation - examination

>>>	13	An examination by the specialist/haematologist is recommended	87 %	>>>	13	An examination by the specialist/haematologist is recommended	87 %
	2	An examination by the specialist/haematologist is not necessary	13 %		2	An examination by the specialist/haematologist is not necessary	13 %

Diagnosis - anaemia

1	Exact determination impossible	6,7 %	
1	Normocytosis	6,7 %	
>>>	11	Microcytosis	73 %
7	Hypochromia	47 %	
>>>	5	Thalassemia and other congenital anaemias	33 %

Diagnosis - chronic myeloproliferative disease

>	2	Exact determination impossible	13 %
>	8	Polycythemia vera	53 %
	2	Essential thrombocythemia	13 %

Diagnosis - platelets disorders

4	Thrombocytosis	27 %
2	Other findings	13 %

Diagnosis - other

1	Viral infection incl. inf. mononucleosis	6,7 %
1	Other reactive changes	6,7 %
1	Allergy	6,7 %

Smear quality

15	Acceptable	100 %	15	Acceptable	100 %
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Staining

12	Acceptable	80 %	13	Acceptable	87 %
3	Not acceptable (give a reason)	20 %	2	Not acceptable (give a reason)	13 %

Evaluation of the results - scoring system

DIF2/21

Sample A

Maximal achievable score: 69

Successful participants (success 60 % and more): 13 (it is 87 %)
 Minimal success in this round: 42,0 %
 Maximal success in this round: 98,6 %

Sample B

Maximal achievable score: 111

Successful participants (success 60 % and more): 14 (it is 93 %)
 Minimal success in this round: 52,3 %
 Maximal success in this round: 98,2 %

Number of participants: 15

in both samples: 13 (it is 87 %)

Number of the participants that succeeded:

in one sample: 1 (it is 7 %)

in no sample: 1 (it is 7 %)