

# SUMMARY STATISTICS

Filter: Slovakia

## EQA round: DIF3/21 - Peripheral Blood Morphology Evaluation

Deadline (EQA round closed): 17.09.2021

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
<b>WBC - differential count</b>						
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	0,013	0,003 - 0,043	0,015	0,008	0,000 - 0,036	0,019
Segmented neutrophil granulocytes	0,190	0,138 - 0,251	0,177	0,737	0,668 - 0,795	0,734
Eosinophils - immature forms	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Eosinophil segmented granulocytes	0,010	0,000 - 0,036	0,011	0,018	0,005 - 0,050	0,016
Basophilic granulocytes	0	0,000 - 0,018	0,000	0,005	0,000 - 0,028	0,002
Monocytes	0,090	0,050 - 0,139	0,096	0,046	0,021 - 0,084	0,043
Lymphocytes	0,697	0,626 - 0,758	0,696	0,189	0,138 - 0,251	0,181
Plasma cells	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Erythroblasts (number)	1,000	0,000 - 4,000	0,703	0	0,000 - 2,000	0,000

### Sample A

### Sample B

#### WBC - morphology

1	No changes	4,8 %	>>> 11	No changes	52 %
1	Agranulation	4,8 %	1	Hypergranulation/toxic granulation	4,8 %
2	Hyposegmentation / asegmentation / pelgeroid	9,5 %	2	Agranulation	9,5 %
3	Atypical/reactive/pathological monocytes/promono.	14 %	4	Hypersegmented granulocytes	19 %
>	Denuded nuclei/cells, nuclear shadows / smudge cells	38 %	1	Hyposegmentation / asegmentation / pelgeroid	4,8 %
1	Cytoplasmatic fragments	4,8 %	2	Denuded nuclei/cells, nuclear shadows / smudge cells	9,5 %
>>>	Vacuolisation	38 %	2	Vacuolisation	9,5 %
1	LGL/big lymphocytes	4,8 %	2	LGL/big lymphocytes	9,5 %
8	Lymphocytes - reactive forms	38 %	2	Lymphocytes - reactive forms	9,5 %
>>>	"Hairy" lymphocytes	86 %	2	Lymphocytes - atypical forms (except "hairy")	9,5 %
3	Lymphocytes - atypical forms (except "hairy")	14 %	1	Nucleus fragments of neutrophiles	4,8 %

#### WBC - relative changes of count

>>>	20	Neutropenia	95 %	5	Normal count	24 %
>>>	20	Lymphocytosis	95 %	> 13	Neutrophilia	62 %
>	6	Monocytosis	29 %	> 14	Lymphocytopenia	67 %
1	Left shift	4,8 %	1	Basophilia	4,8 %	

#### RBC - morphology

1	No changes	4,8 %	3	Normocytosis	14 %	
3	Normocytosis	14 %	>>> 17	Microcytosis	81 %	
>>>	13	Anisocytosis	62 %	2	Anisocytosis	9,5 %
2	Poikilocytosis	9,5 %	1	Eliptocytes, ovalocytes	4,8 %	
>>>	9	Eliptocytes, ovalocytes	43 %	1	Spherocytes	4,8 %
3	Spherocytes	14 %	> 5	Stomatocytes	24 %	
>	9	Stomatocytes	43 %	1	Dacryocytes	4,8 %
>>>	13	Dacryocytes	62 %	>>> 18	Hypochromia	86 %
1	Acanthocytes	4,8 %	5	Rouleaux formation	24 %	
1	Echinocytes	4,8 %				
3	Target cells	14 %				
>	2	Schistocytes (and other fragmentocytes)	9,5 %			
1	Polychromasia	4,8 %				
>	2	Hypochromia	9,5 %			
1	Rouleaux formation	4,8 %				

## Sample A

## Sample B

## Platelets - morphology

3	No changes	14 %	>	11	No changes	52 %	
>>>	17	Large platelets	81 %	>	9	Large platelets	43 %
3	Small platelets	14 %		2	Small platelets	9,5 %	
3	Platelets hypogranulation	14 %		1	Platelet aggregates	4,8 %	
				1	Platelets hypogranulation	4,8 %	

## Clinical recommendation - smear

>>>	19	Blood smear is pathological	90 %	>>>	12	Blood smear is pathological	57 %
	2	Blood smear within physiological limits or with reactive changes	9,5 %		8	Blood smear within physiological limits or with reactive changes	38 %

## Clinical recommendation - examination

>>>	19	An examination by the specialist/haematologist is recommended	90 %	>	11	An examination by the specialist/haematologist is recommended	52 %
	2	An examination by the specialist/haematologist is not necessary	9,5 %	>	9	An examination by the specialist/haematologist is not necessary	43 %

## Diagnosis - anaemia

	3	Exact determination impossible	14 %
	1	Normocytosis	4,8 %
>>>	13	Microcytosis	62 %
>	15	Hypochromia	71 %

## Diagnosis - myelodysplastic syndrome

	1	Myelodysplastic syndrome	4,8 %
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## Diagnosis - mature lymphocytic cells neoplasms

>	3	Exact determination impossible	14 %		1	Exact determination impossible	4,8 %
>>>	16	HCL (hairy cell leukaemia)	76 %				

## Diagnosis - platelets disorders

8	Thrombocytopenia	38 %
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## Diagnosis - other

1	Viral infection incl. inf. mononucleosis	4,8 %	2	Other reactive changes	9,5 %
1	Other reactive changes	4,8 %			
1	Other disease	4,8 %			

## Smear quality

21	Acceptable	100 %	21	Acceptable	100 %
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## Staining

21	Acceptable	100 %	21	Acceptable	100 %
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## Evaluation of the results - scoring system

## DIF3/21

## Sample A

## Maximal achievable score: 99

Successful participants (success 60 % and more): 20 (it is 95 %)

Minimal success in this round: 50,5 %

Maximal success in this round: 99,0 %

## Sample B

## Maximal achievable score: 63

Successful participants (success 60 % and more): 20 (it is 95 %)

Minimal success in this round: 39,7 %

Maximal success in this round: 100,0 %

## Number of participants: 21

in both samples: 19 (it is 90 %)

Number of the participants that succeeded: in one sample: 2 (it is 10 %)

in no sample: 0 (it is 0 %)