

SUMMARY STATISTICS

EQA round: NF1/19 - Peripheral Blood Smears - Photos

Dead line (EQA round closed): 19.04.2019

Professional supervision: Czech Haematological Society
National Reference Laboratory for Haematology

Key:	>>>	... marks correct (expected) result
	>	... marks conditionally correct (acceptable) result

Photo 1

Object no.1 WBC and other nucleous elements - types of cells		1	Monocyte	1,5 %
	>>>	66	Lymphocyte	99 %
WBC - morphology		3	No changes	4,5 %
		1	Nucleocytoplasmatic asynchrony	1,5 %
		1	Cytoplasmatic fragments	1,5 %
	>>>	61	LGL/big lymphocytes	91 %
		2	Lymphocytes - reactive forms	3,0 %
		3	Lymphocytes - atypical forms	4,5 %
Object no.2 WBC and other nucleous elements - types of cells	>>>	52	Lymphocyte	78 %
		15	Bare nuclei, smudge cell	22 %
WBC - morphology		22	No changes	33 %
		2	Nucleocytoplasmatic asynchrony	3,0 %
	>>>	28	Lymphocytes - atypical forms	42 %
Object no.3 WBC and other nucleous elements - types of cells	>>>	67	Lymphocyte	100 %
WBC - morphology	>	58	No changes	87 %
	>	8	Lymphocytes - atypical forms	12 %
RBC - morphology	>	12	Normocytosis	18 %
		7	Macrocytosis	10 %
		11	Anisocytosis	16 %
		1	Eliptocytes	1,5 %
		2	Spherocytes	3,0 %
		20	Stomatocytes	30 %
		8	Dacryocytes	12 %
		1	Acanthocytes	1,5 %
	>	39	Echinocytes	58 %
	>>>	60	Target cells	90 %
	>>>	51	Schistocytes (and other fragmentocytes)	76 %
	>	25	Hypochromia	37 %
	>	31	Howell-Jolly bodies	46 %
		4	Malaric plasmodia	6,0 %
		2	Rouleaux formation	3,0 %
		19	Pappenheimer bodies	28 %
		3	Anisochromia	4,5 %
		5	Knizocytes	7,5 %
	>	10	Ovalocytes	15 %
Platelets - morphology	>	17	No changes	25 %
		2	Large platelets	3,0 %
	>	22	Anisocytosis	33 %
	>	42	Platelets hypo-/agranulation	63 %
		2	Megakaryocytic nucleus fragments	3,0 %

Photo 2

Object no.1 WBC and other nucleous elements - types of cells		1	Neutrophil bar	1,5 %
		1	Neutrophil segment	1,5 %
WBC - morphology	>>>	65	Monocyte	97 %
	>	54	No changes	81 %
		1	Giant bands and metamyelocytes	1,5 %
		1	Hypogranulation/agranulation	1,5 %
	>	11	Atypical/reactive monocytes	16 %
		1	Nucleocytoplasmatic asynchrony	1,5 %
		2	Vacuolisation	3,0 %

Photo 2

Object no.2 WBC and other nucleous elements - types of cells	>>>	67	Lymphocyte	100 %
WBC - morphology	>	24	No changes	36 %
	>	20	Lymphocytes - reactive forms	30 %
		12	"Hairy" lymphocytes	18 %
		10	Lymphocytes - atypical forms	15 %
Object no.3 WBC and other nucleous elements - types of cells		3	Neutrophil bar	4,5 %
	>>>	64	Neutrophil segment	96 %
WBC - morphology		4	No changes	6,0 %
		1	Hypergranulation/toxic granulation	1,5 %
	>>>	57	Hypogranulation/agranulation	85 %
		2	Hypersegmented granulocytes	3,0 %
		6	Hyposegmentation or pseudo Pelger anomaly	9,0 %
		1	Döhle bodies	1,5 %
	>>>	51	Vacuolisation	76 %
RBC - morphology		1	Normocytosis	1,5 %
		18	Microcytosis	27 %
		3	Macrocytosis	4,5 %
	>>>	57	Anisocytosis	85 %
		4	Poikilocytosis	6,0 %
		1	Eliptocytes	1,5 %
	>>>	63	Spherocytes	94 %
		5	Dacryocytes	7,5 %
		1	Echinocytes	1,5 %
		18	Schistocytes (and other fragmentocytes)	27 %
		4	Polychromasia	6,0 %
		1	Hypochromia	1,5 %
		1	Howell-Jolly bodies	1,5 %
		15	Anisochromia	22 %
	>>>	30	Knizocytes	45 %
		16	Ovalocytes	24 %
Platelets - morphology	>>>	67	No changes	100 %

Photo 3

Object no.1 WBC and other nucleous elements - types of cells	>>>	67	Lymphocyte	100 %
WBC - morphology		3	No changes	4,5 %
	>>>	42	LGL/big lymphocytes	63 %
	>	27	Lymphocytes - reactive forms	40 %
		3	Lymphocytes - atypical forms	4,5 %
Object no.2 WBC and other nucleous elements - types of cells	>>>	67	Lymphocyte	100 %
WBC - morphology		1	Cytoplasmatic fragments	1,5 %
	>	42	Vacuolisation	63 %
	>>>	41	LGL/big lymphocytes	61 %
	>	32	Lymphocytes - reactive forms	48 %
		5	Lymphocytes - atypical forms	7,5 %
RBC - morphology		1	No changes	1,5 %
		11	Normocytosis	16 %
		1	Microcytosis	1,5 %
	>	21	Macrocytosis	31 %
	>	14	Anisocytosis	21 %
		4	Poikilocytosis	6,0 %
	>>>	63	Spherocytes	94 %
	>	29	Dacryocytes	43 %
		1	Schistocytes (and other fragmentocytes)	1,5 %
		7	Polychromasia	10 %
		1	Hypochromia	1,5 %
		1	Howell-Jolly bodies	1,5 %
		3	Anisochromia	4,5 %
		3	Knizocytes	4,5 %
	>	18	Ovalocytes	27 %
Platelets - morphology	>>>	58	No changes	87 %
		2	Anisocytosis	3,0 %
		1	Platelet satellitism	1,5 %
		7	Platelets hypo-/agranulation	10 %

Photo 4

Object no.1 WBC and other nucleous elements - types of cells WBC - morphology	>>>	67	Monocyte	100 %
		13	No changes	19 %
	>>>	53	Atypical/reactive monocytes	79 %
		4	Vacuolisation	6,0 %
Object no.2 WBC and other nucleous elements - types of cells WBC - morphology	>>>	67	Monocyte	100 %
		13	No changes	19 %
	>>>	53	Atypical/reactive monocytes	79 %
		4	Vacuolisation	6,0 %
Object no.3 WBC and other nucleous elements - types of cells WBC - morphology	>>>	67	Eosinophil segment	100 %
	>>>	62	No changes	93 %
		1	Hypogranulation/agranulation	1,5 %
		4	Hypersegmented granulocytes	6,0 %
RBC - morphology		2	No changes	3,0 %
		13	Normocytosis	19 %
		1	Microcytosis	1,5 %
		1	Macrocytosis	1,5 %
		5	Anisocytosis	7,5 %
		1	Poikilocytosis	1,5 %
		7	Spherocytes	10 %
	>>>	66	Stomatocytes	99 %
	>	45	Dacryocytes	67 %
	>	43	Echinocytes	64 %
	>	14	Hypochromia	21 %
		10	Rouleaux formation	15 %
		1	Knizocytes	1,5 %
>	21	Ovalocytes	31 %	
Platelets - morphology	>>>	48	No changes	72 %
		1	Small platelets	1,5 %
		6	Anisocytosis	9,0 %
		15	Platelets hypo-/agranulation	22 %

Evaluation of the results - scoring system

NF1/19

	Photo 1	Photo 2	Photo 3	Photo 4
Maximal achievable score:	35	45	30	40
Successful participants (success 60 % and more):	55 (it is 82 %)	60 (it is 90 %)	59 (it is 88 %)	61 (it is 91 %)
Minimal success in this round:	25,7 %	37,8 %	36,7 %	37,5 %
Maximal success in this round:	100,0 %	100,0 %	100,0 %	100,0 %
Number of participants: 67				
Number of participants that succeeded:	in all 4 photos:	45 (it is 67 %)		
	in 3 photos:	14 (it is 21 %)		
	in 2 photos:	6 (it is 9 %)		
	in 1 photo:	1 (it is 1 %)		
	in no photo:	1 (it is 1 %)		