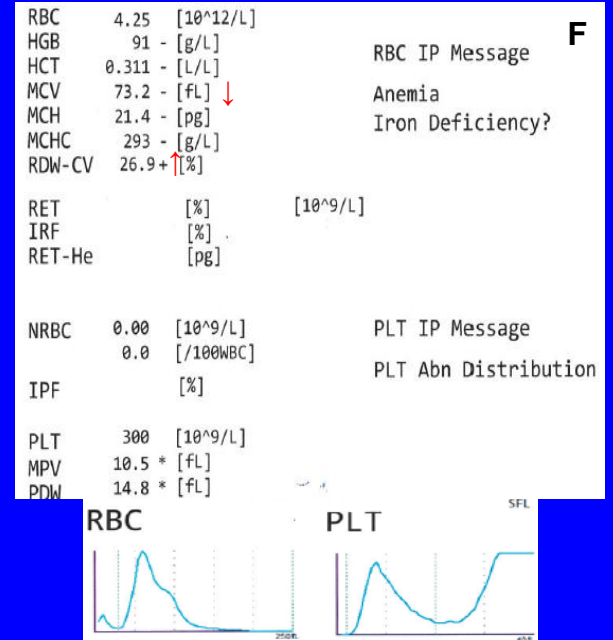
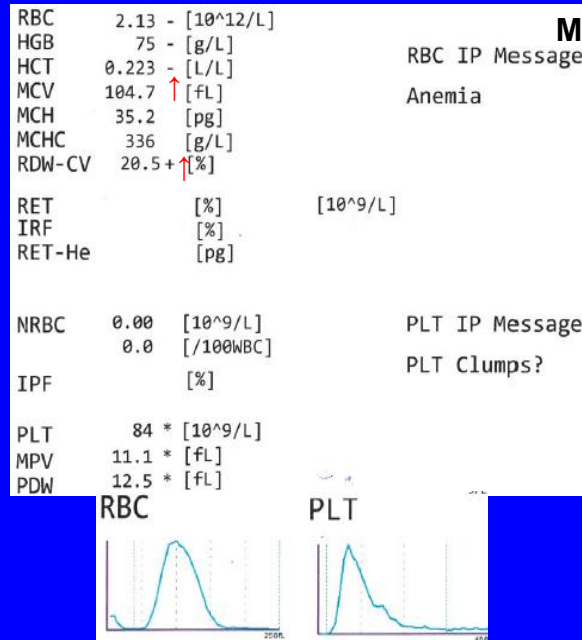
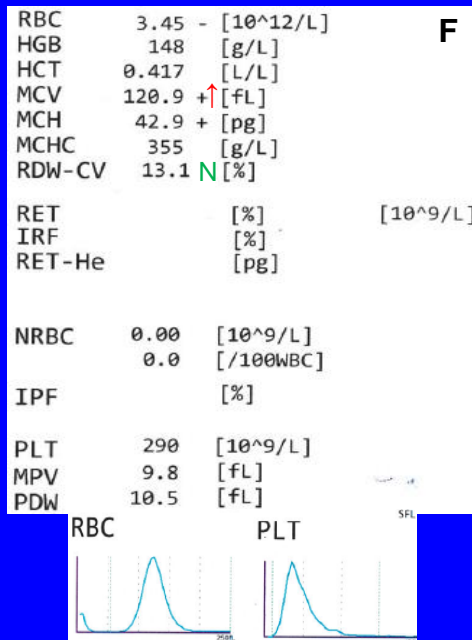
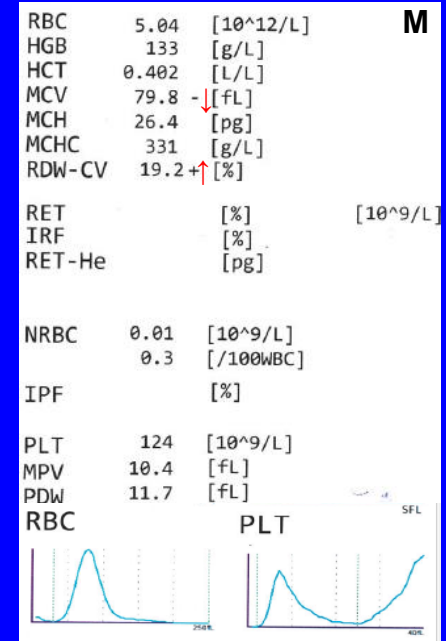
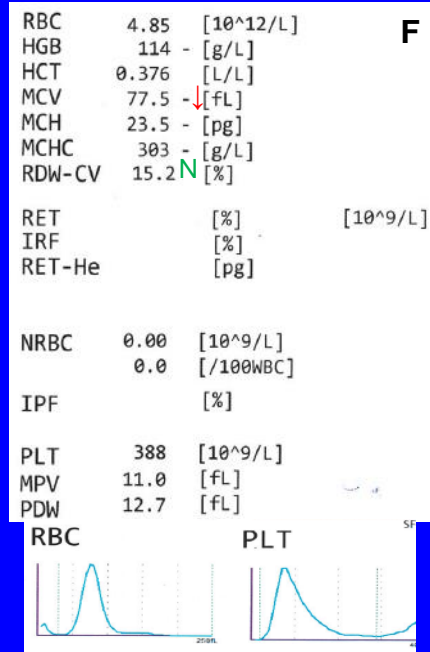
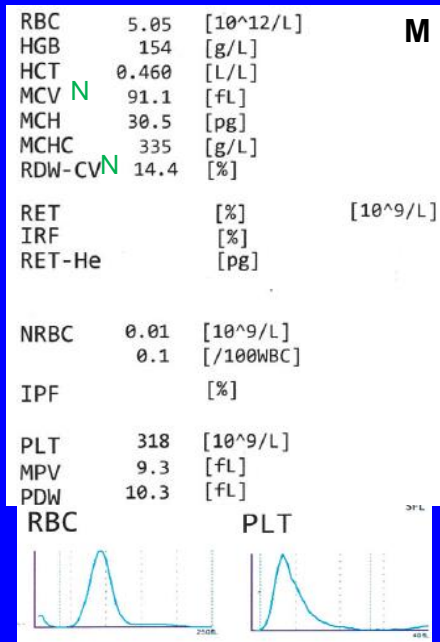


Příklady KO k některým diagnózám

Bourková L., OKH FN Brno

Příklady vyšetření RBC v krevním obraze



Porucha syntézy hemu

Sideropenická anémie

(nedostatek železa)

WBC	<u>2.82</u>	10e9/L	WVF	.982	
SEG	<u>1.49</u>		%S	52.8	
BAND	0.00		%BD	0.00	
IG	0.00		%IG	0.00	
BLST	0.00		%BL	0.00	
MONe	.228		%Me	8.10	
EOS	.137		%E	4.86	
BASO	.063		%B	<u>2.22</u>	
LYMe	<u>.902</u>		%Le	32.0	
VARL	0.00		%VL	0.00	
RBC	<u>3.70s</u>	10e12/L	RBCo	<u>3.67</u>	
HGB	<u>85.5</u>	g/L	%MIC	14.0	
HCT	<u>.283s</u>	L/L	%MAC	.448	ASYM
MCV	<u>76.5s</u>	fL	%HPO	----	
MCH	<u>23.1s</u>	pg	%HPR	----	
MCHC	<u>302.s</u>	g/L			
RDW	<u>19.2s</u>	%CV			
HDW	----	%			
RETC	----	10e9/L	%R	----	
IRF	----				
NRBC	0.00	10e9/L	NRW	0.00	
MCVr	----	fL			
MCHr	----	pg			
CHCr	----	g/L			
PLTo	220.	10e9/L	PLTi	228.	
MPV	8.70	fL	CD61	----	
PDW	15.6	10(GSD)	PLTs	----	

Porucha syntézy globínu

Thalasemie

WBC	5.81	[10 ⁹ /L]		
NEUT	3.10	[10 ⁹ /L]	53.4	[%]
LYMPH	1.95	[10 ⁹ /L]	33.6	[%]
MONO	0.46	[10 ⁹ /L]	7.9	[%]
EO	0.27	[10 ⁹ /L]	4.6	[%]
BASO	0.03	[10 ⁹ /L]	0.5	[%]
IG	0.01	[10 ⁹ /L]	0.2	[%]
RBC	7.27 +	[10 ¹² /L]		
HGB	145	[g/L]		
HCT	0.461	[L/L]		
MCV	63.4 -	[fL]		
MCH	19.9 -	[pg]		
MCHC	315	[g/L]		
RDW-CV	17.6 +	[%]		
RET		[%]		[10 ⁹ /L]
IRF		[%]		
RET-He		[pg]		
NRBC	0.00	[10 ⁹ /L]		
	0.0	[/100WBC]		
IPF		[%]		
PLT	239	[10 ⁹ /L]		
MPV	9.5	[fL]		
PDW	10.1	[fL]		
PCT	0.23	[%]		

Makrocytární anémie při MDS

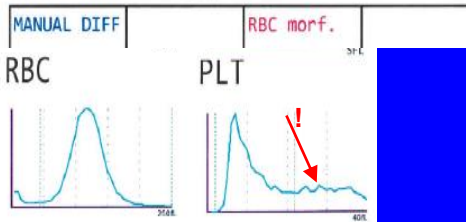
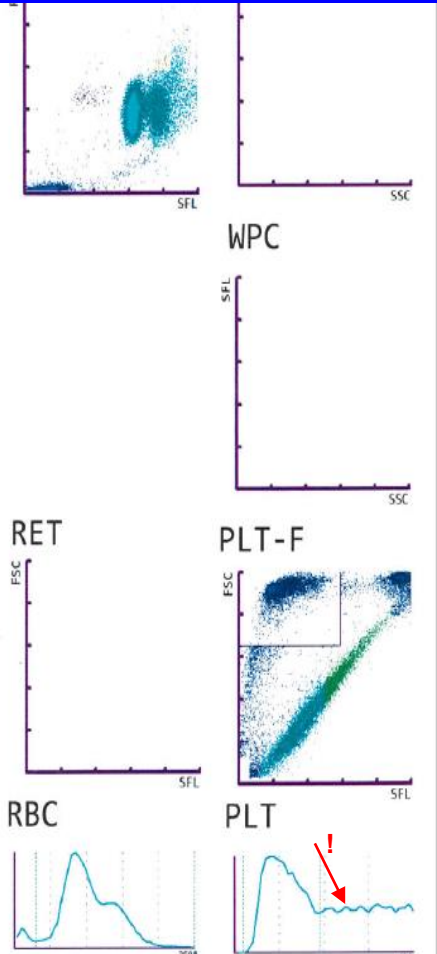
Krevní obraz						
WBC	2.020	x10 ⁹ /l	(	4.000... 10.000)	VL	x<.(
RBC	1.61	x10 ¹² /l	(	3.80... 5.20)	VL	x<.(
HGB	69.00	g/l	(	120.00... 160.00)	VL	x<.(
HCT	0.20	l/l	(	0.35... 0.46)	VL	x<.(
MCV	124.80	fl	(	84.00... 96.00)	VH	(
PLT	110.00	x10 ⁹ /l	(	150.00... 400.00)	VL	x<.(
MCH	42.90	pg	(	28.00... 34.00)	VH	(
MCHC	343.00	g/l	(	320.00... 360.00)	((
RDW	15.80	%	(	10.00... 15.20)	VH	(
MPV	12.70	fl	(	7.80... 11.00)	VH	(
NEU	27.20	%	(	45.00... 70.00)	VL	x<.(
LYM	55.40	%	(	20.00... 45.00)	VH	(
MONO	10.40	%	(	2.00... 12.00)	((
EOS	4.50	%	(	0.00... 5.00)	((
BASO	2.50	%	(	0.00... 2.00)	VH	(
NEU	0.550	x10 ⁹ /l	(	2.000... 7.000)	VL	x<.(
LYM	1.120	x10 ⁹ /l	(	0.800... 4.000)	((
MONO	0.210	x10 ⁹ /l	(	0.080... 1.200)	((
EOS	0.090	x10 ⁹ /l	(	0.000... 0.500)	((
BASO	0.050	x10 ⁹ /l	(	0.000... 0.200)	((
NRBC	0.00	x10 ⁹ /l	(	0.00... 0.00)	((
NRBC/WBC	0.00	/100WBC	(	0.00... 0.00)	((
NEU mikroskop.	28.00	%	(	47.00... 70.00)	VL	x<.(
TYcE mikroskop.	2.00	%	(	0.00... 4.00)	((
LYM mikroskop.	58.00	%	(	20.00... 45.00)	VH	(
MONO mikroskop.	4.00	%	(	2.00... 10.00)	((
EOS mikroskop.	2.00	%	(	0.00... 5.00)	((
BASO mikroskop.	6.00	%	(	0.00... 1.00)	VH	(
META mikroskop.	0.00	%	(	0.00... 0.00)	((
MYELO mikroskop.	0.00	%	(	0.00... 0.00)	((
PROMY mikroskop.	0.00	%	(	0.00... 0.00)	((
MYBLASTmikroskop	0.00	%	(	0.00... 0.00)	((
PROLY mikroskop.	0.00	%	(	0.00... 0.00)	((
PLAZMATICKEbunky	0.00	%	(	0.00... 0.00)	((
NEDIF. bunky	0.00	%	(	0.00... 0.00)	((
NEDIF. blasty	0.00	%	(	0.00... 0.00)	((
NRBC	0	/100WBC	(	0... 0)	((
LGL	0.040	x10 ⁹ /l	(	0.124... 0.332)	VL	x<.(
Hodnoceni RBC	hypochrom. ERY, makrocyty, oj. schistocyty, Howell-Jollyho teliska, oj.slzickovite, ovalocyty					

Příklady krevních obrazů při ztrátě erytrocytů

krváčivý stav schistocyty - 5

WBC	3.40	-	[10 ⁹ /L]	WBC IP Message
NEUT	1.66	-	[10 ⁹ /L]	48.9 [%]
LYMPH	1.50	-	[10 ⁹ /L]	44.1 [%]
MONO	0.09	-	[10 ⁹ /L]	2.6 [%]
EO	0.14	-	[10 ⁹ /L]	4.1 [%]
BASO	0.01	-	[10 ⁹ /L]	0.3 [%]
IG	0.02	-	[10 ⁹ /L]	0.6 [%]
RBC	1.40	-	[10 ¹² /L]	RBC IP Message
HGB	61 *	-	[g/L]	Anemia
HCT	0.164	-	[L/L]	Turbidity/HGB Interf?
MCV	117.1	+	[fL]	
MCH	43.6 *	-	[pg]	
MCHC	372 *	-	[g/L]	
RDW-CV	19.7	+	[%]	
RET	1.61	[%]	22.5 [10 ⁹ /L]	
IRF	9.1	[%]		
RET-He	43.6	[pg]		
NRBC	0.02	[10 ⁹ /L]		PLT IP Message
	0.6	[/100WBC]		Thrombocytopenia
IPF	5.9	[%]		
PLT &F	56	-	[10 ⁹ /L]	
MPV	10.8	[fL]		
PDW	14.3	[fL]		
PCT	0.06	-	[%]	

WBC	31.65	+	[10 ⁹ /L]	WBC IP Message
NEUT			[10 ⁹ /L]	[%]
LYMPH			[10 ⁹ /L]	[%]
MONO			[10 ⁹ /L]	[%]
EO			[10 ⁹ /L]	[%]
BASO			[10 ⁹ /L]	[%]
IG			[10 ⁹ /L]	[%]
RBC	2.42	-	[10 ¹² /L]	RBC IP Message
HGB	82	-	[g/L]	Anemia
HCT	0.248	-	[L/L]	Fragments?
MCV	102.5	+	[fL]	
MCH	33.9	[pg]		
MCHC	331	[g/L]		
RDW-CV	30.9	+	[%]	
RET		[%]	[10 ⁹ /L]	
IRF		[%]		
RET-He		[pg]		
NRBC	0.12	[10 ⁹ /L]		PLT IP Message
	0.4	[/100WBC]		PLT Abn Distribution
IPF	23.6	[%]		
PLT &F	146	-	[10 ⁹ /L]	
MPV	----	[fL]		
PDW	----	[fL]		
PCT	----	[%]		



krváčivý stav schistocyty - 60

Příklady krevních obrazů u CML

WBC	12.4	10e9/L	WVF	.975	
SEG	3.08*		%S	24.8*	BAND
BAND	.126*		%BD	1.01*	IG
IG	.845*		%IG	6.81*	
BLST	0.00		%BL	0.00	
MONE	.817		%Me	6.58	
EOS	4.34*		%E	35.0*	
BASO	.826		%B	6.66	
LYMe	2.38		%Le	19.1	
VARL	0.00		%VL	0.00	
RBC	3.63	10e12/L	RBCo	3.63	
HGB	107.	g/L	%MIC	3.81	
HCT	.334	L/L	%MAC	6.98	
MCV	92.0	fL	%HPO	----	
MCH	29.5	pg	%HPR	----	
MCHC	321.	g/L			
RDW	18.0	%CV			
HDW	----	%			
RETC	----	10e9/L	%R	----	
IRF	----				
NRBC	0.00	10e9/L	NR/W	0.00	
MCVr	----	fL			
MCHr	----	pg			
CHCr	----	g/L			
PLTo	920.	10e9/L	PLTi	949.	
MPV	7.83	fL	CD61	----	
PDW	15.9	10(GSD)	PLTs	----	
PCT	7.20	mL/L	PLTI	----	
%rP	----	%			

Manual Differential		RBC Morphology	
SEG	31	META	3
BAND	2	MYELO	4
LYMPH	18	PRO	
MONO	8	BLAST	2
EOSIN	11	VAR LYM	✓
BASO	21	TOXGRAN	
PLT EST		SPHERO	
Comment:	hypersegmentace, hypogranulace		
DIFF by:		Date:	

WBC	64.34 +	[10^9/L]	WBC IP Message
NEUT	59.62 *	[10^9/L]	92.7 + [%]
LYMPH	2.15	[10^9/L]	3.3 - [%]
MONO	0.71	[10^9/L]	1.1 - [%]
EO	0.39 *	[10^9/L]	0.6 + [%]
BASO	1.47 +	[10^9/L]	2.3 + [%]
IG	14.64 *	[10^9/L]	22.8* [%]
RBC	3.94	[10^12/L]	RBC IP Message
HGB	117 -	[g/L]	
HCT	0.353	[L/L]	
MCV	89.6	[fL]	
MCH	29.7	[pg]	
MCHC	331	[g/L]	
RDW-CV	17.2 +	[%]	
RET	3.73	[%]	147.0 [10^9/L]
IRF	22.3	[%]	
RET-He	31.9	[pg]	

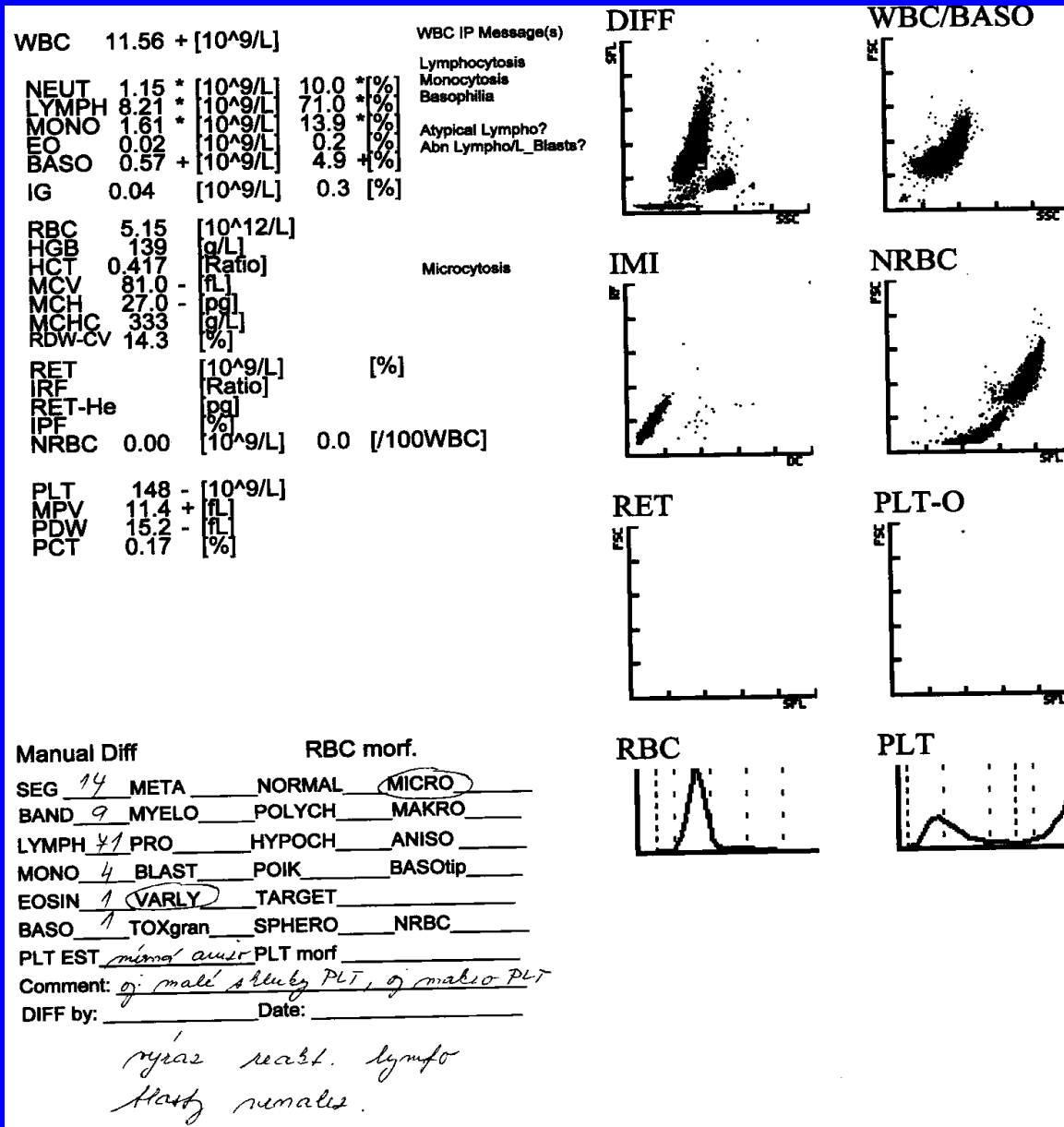
NRBC	0.02	[10^9/L]	PLT IP Message
	0.0	[/100WBC]	
IPF		[%]	
PLT	990 +	[10^9/L]	
MPV	9.9	[fL]	
PDW	10.5	[fL]	
PCT	0.98 +	[%]	

2283
A 1405/11.5
autochomni

MANUAL DIFF		RBC morf.	
SEG	70	META	6
BAND	8	MYELO	7
LYMPH	1	PRO	2
MONO	2	BLAST	1
EOSIN	1	ATYPLY	
BASO	2	TOXgran	
PLT			
Comment:	autochomni g. mikro		
DIFF by:		Date:	

LGL-0
 hyporegulara neu
 valuelovaa neu.
 Konyvia mikroskopicky
 Pouit

Příklad krevního obrazu pro dg: infekční mononukleóza



Příklad krevního obrazu u CLL

WBC	119.63 +	[10 ⁹ /L]	WBC IP Message
NEUT	5.31 *	[10 ⁹ /L]	4.4 * [%]
LYMPH	60.04 *	[10 ⁹ /L]	50.2 * [%]
MONO	53.45 *	[10 ⁹ /L]	44.7 * [%]
EO	0.34	[10 ⁹ /L]	0.3 [%]
BASO	0.49 +	[10 ⁹ /L]	0.4 [%]
WBC Abn Scattergram Blasts/Abn Lympho?			
IG	0.61 *	[10 ⁹ /L]	0.5* [%]
RBC	3.75 -	[10 ¹² /L]	RBC IP Message
HGB	118 -	[g/L]	
HCT	0.363	[L/L]	
MCV	96.8 +	[fL]	
MCH	31.5	[pg]	
MCHC	325	[g/L]	
RDW-CV	13.4	[%]	
RET		[%]	[10 ⁹ /L]
IRF		[%]	
RET-He		[pg]	
NRBC	0.07	[10 ⁹ /L]	PLT IP Message
	0.1	[/10 ⁶ WBC]	
IPF		[%]	
PLT	173	[10 ⁹ /L]	
MPV	9.9	[fL]	
PDW	11.0	[fL]	
PCT	0.17	[%]	

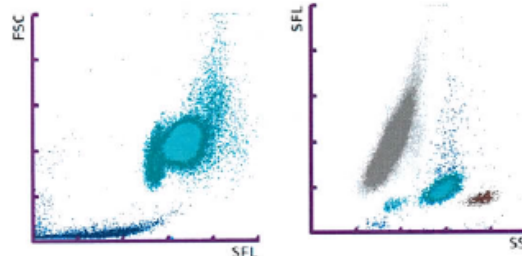
2 Out	In	In	In	1 Out	*InvalidData
WBC	106.1	10e9/L	WVF	.970	
SEG	5.59		%S	5.28	
BAND	0.00		%BD	0.00	
IG	0.00		%IG	0.00	
BLST	.016		%BL	.015	BLAST 0.63
MONe	1.32		%Me	1.25	
EOS	.442		%E	.418	
BASO	0.00*		%B	0.00*	
LYMe	95.7		%Le	90.5	
VARL	2.65		%VL	2.51	VARLYM 0.80
RBC	3.19	10e12/L	RBCo	3.16	
HGB	97.4	g/L	%MIC	3.49	
HCT	.297	L/L	%MAC	7.82	
MCV	92.9	fL	%HPO	18.3	
MCH	30.5	pg	%HPR	0.00	
MCHC	328.	g/L			
RDW	19.6	%CV			
HDW	8.48	%			
RETC	45.1	10e9/L	%R	1.41	
IRF	.310				
NRBC	0.00	10e9/L	NRW	0.00	
MCVr	107.	fL			
MCHr	28.7	pg			
CHCr	270.	g/L			
PLTo	107.	10e9/L	PLTi	110.	
MPV	9.39	fL	CD61	---	
PDW	17.9	10(GSD)	PLTs	---	
PCT	1.01	mL/L	PLTI	---	
%rP	4.19	%			
Manual Differential		RBC Morphology		<i>ovals</i>	
SEG	23	META	NORMAL	MICRO	✓
BAND		MYELO	POLYCH	MACRO	✓
LYMPH	74	PRO	HYPOCH	ANISO	✓
MONO		BLAST	POIK	BASOSTIP	
EOSIN	1	VAR LYM	TARGET		
BASO		TOXGRAN	SPHERO	NRBC	
PLT EST	<i>aniso schistocytes</i>	PLT MORPH			
Comment:	<i>gumprecht. obzry</i>				
DIFF by:		Date:			

Příklad krevního obrazu pro dg: MCL

Morph.

WBC	90.04 +	[10 ⁹ /L]	
NEUT	5.24 *	[10 ⁹ /L]	5.8 * [%]
LYMPH	64.78 *	[10 ⁹ /L]	71.9 * [%]
MONO	19.32 *	[10 ⁹ /L]	21.5 * [%]
EO	0.52 +	[10 ⁹ /L]	0.6 [%]
BASO	0.18 *	[10 ⁹ /L]	0.2 * [%]

WBC IP Message
WBC Abn Scattergram
Blasts/Abn Lympho?

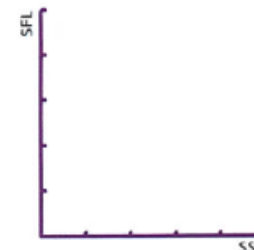


IG 0.30 * [10⁹/L] 0.3* [%]

RBC	3.98	[10 ¹² /L]
HGB	122	[g/L]
HCT	0.379	[L/L]
MCV	95.2	[fL]
MCH	30.7	[pg]
MCHC	322	[g/L]
RDW-CV	14.3	[%]

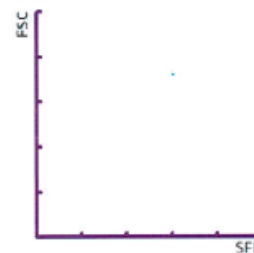
RBC IP Message

WPC

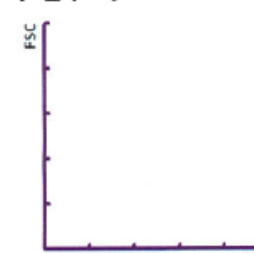


RET		[%]	[10 ⁹ /L]
IRF		[%]	
RET-He		[pg]	

RET



PLT-F



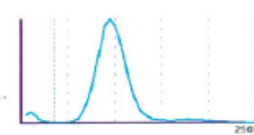
NRBC	0.00	[10 ⁹ /L]
	0.0	[/100WBC]

PLT IP Message

IPF [%]

PLT	196	[10 ⁹ /L]
MPV	11.4	[fL]
PDW	15.1	[fL]
PCT	0.22	[%]

RBC



PLT

