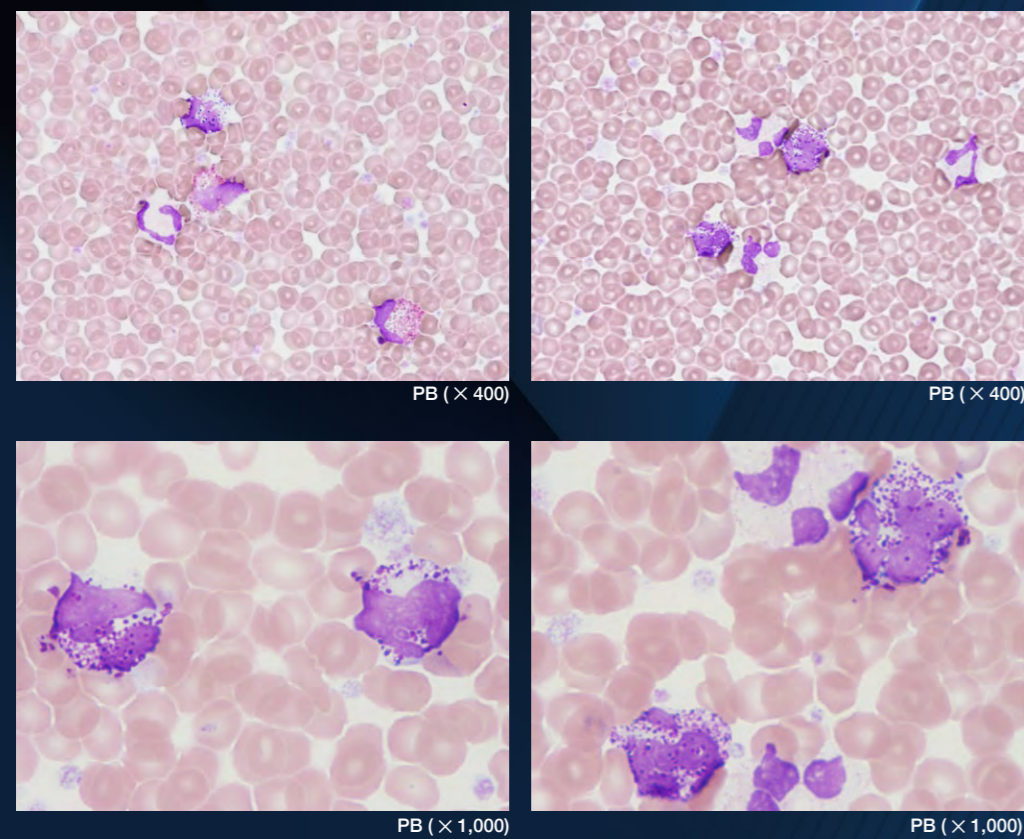


Case 3

Basophilia

A female patient, aged in her 50s with untreated polycythemia vera (JAK2 V617F positive), undergoing follow-up observation.

Blood smear (May-Giemsa staining)



Visual differential counts

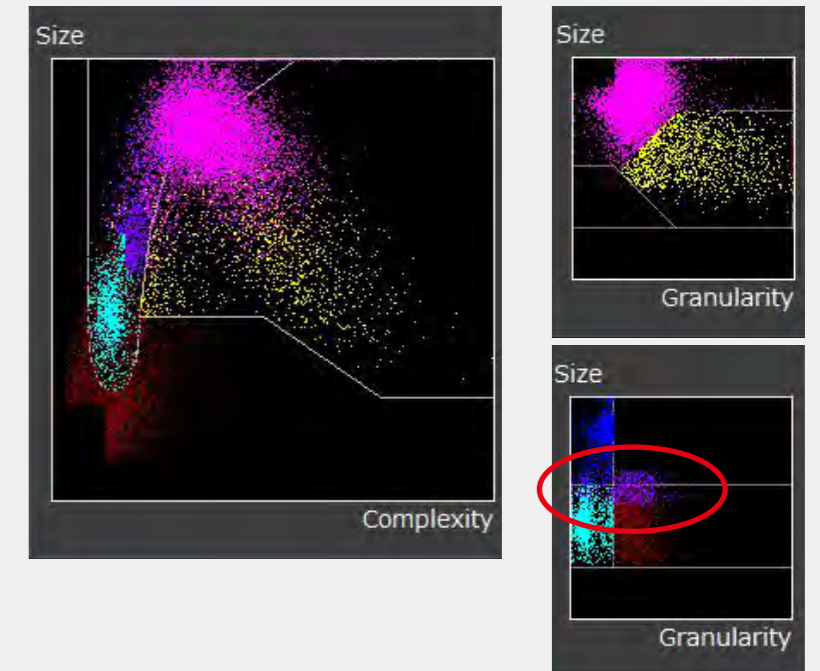
Blast	0.0
Promyelo	0.0
Myelo	0.0
Meta	0.0
Band	1.5
Seg	81.5
Eosino	5.5
Baso	3.0
Mono	1.5
Lympho	7.0
At-Ly	0.0
NRBC	0.0
Other	0.0

Celltac Data

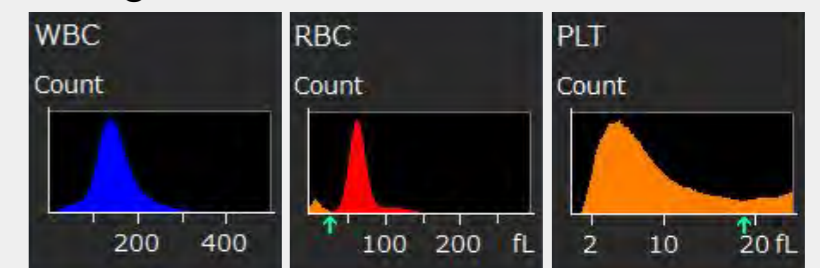
Numerical results

WBC	34.07	H	10 ³ /μL
RBC	7.41	H	10 ⁶ /μL
HGB	15.03		g/dL
HCT	49.0		%
MCV	66.1	L	fL
MCH	20.3	L	pg
MCHC	30.7	L	g/dL
RDW-CV	17.6	H	%
RDW-SD	46.5		fL
PLT	849.9	H	10 ³ /μL
PCT	0.71	H	%
MPV	8.4		fL
PDW	20.1	H	%
P-LCR	38.8		%
P-LCC	329.8	H	10 ³ /μL
NE	25.47	*	10 ³ /μL
LY	2.75	*	10 ³ /μL
MO	1.50	*	10 ³ /μL
EO	3.11	*	10 ³ /μL
BA	1.24	*	10 ³ /μL
NE%	74.73	*	%
LY%	8.08	*	%
MO%	4.41	*	%
EO%	9.14	*	%
BA%	3.64	*	%
RET	0.1252		10 ⁶ /μL
RET%	1.69		%
IRF	14.1		%
LFR	85.9	L	%
MFR	9.2		%
HFR	4.9	H	%

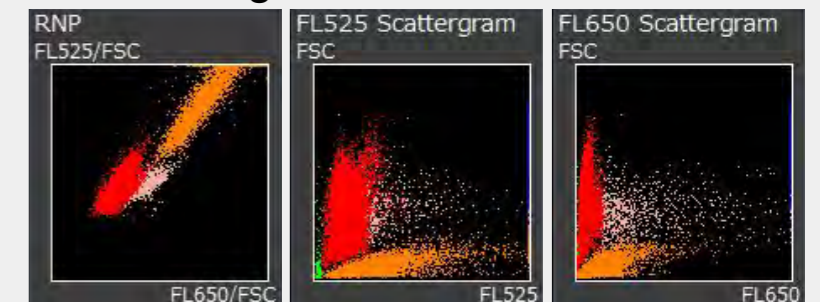
Scattergrams



Histograms



RET Scattergrams



Flags

Morphological Flags	Numerical Flags
Blast	Leukocytosis
Immature Granulocyte	Neutrophilia
Left Shift	Monocytosis
Ne-Eo Interference	Eosinophilia
	<u>Basophilia</u>

	Erythrocytosis
	Microcytosis
	Thrombocytosis

Explanation of case

A complete blood count revealed an elevated number of white blood cells, red blood cells, and platelets. A visual, white blood cell differential count showed an increase in basophils to 3.0%. This was considered to be due to the polycythemia vera. Smear samples indicated an increase in mature basophils. Some basophils with few granules were observed because the granules of basophils are water soluble. Large platelets were also observed in some places.

Explanation of scattergram/histogram

A number of plots appeared in the basophilic area(○) on the MO-BA scattergram, with the indication, "Basophilia" flag.