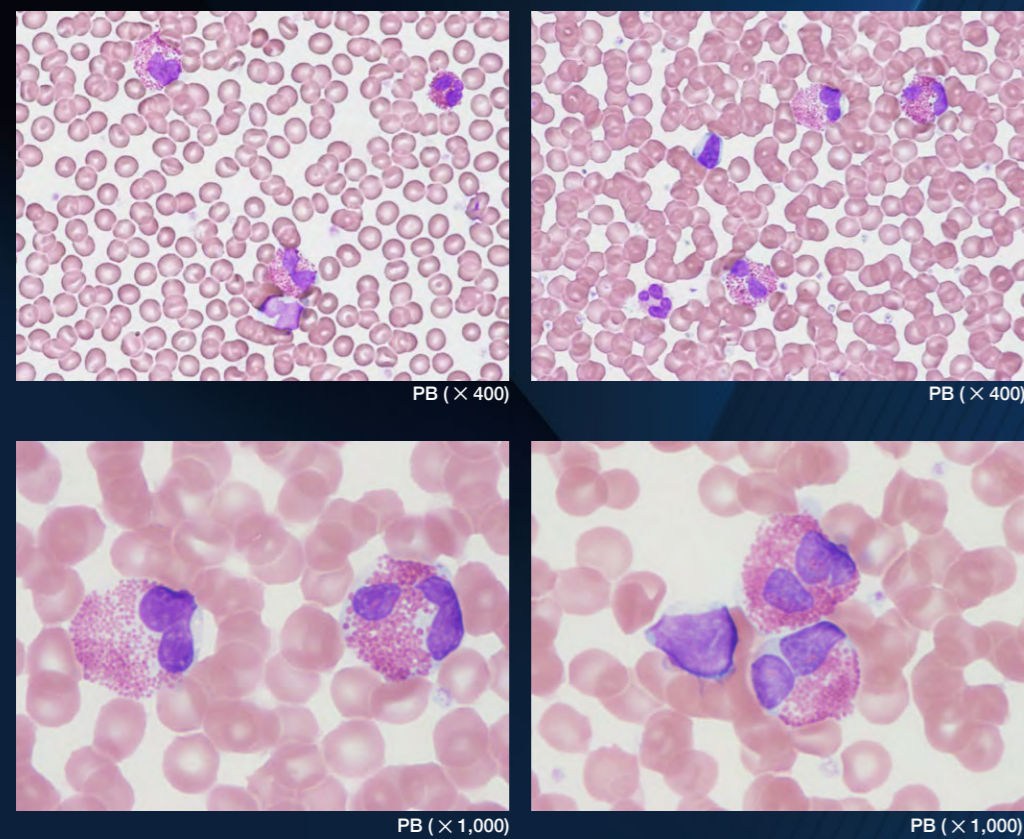


Case 2

Eosinophilia

A female patient, age in her 50s, attending the hospital for atopic dermatitis.

Blood smear (May-Giemsa staining)



Visual differential counts

Blast	0.0
Promyelo	0.0
Myelo	0.0
Meta	0.0
Band	0.0
Seg	24.0
Eosino	43.0
Baso	2.0
Mono	4.0
Lympho	27.0
At-Ly	0.0
NRBC	0.0
Other	0.0

Explanation of case

A complete blood count revealed an elevated number of white blood cells. A visual white blood cell differential count indicated 43.0 % eosinophils. No other abnormal findings were observed. Markers for genetic mutations associated with increased eosinophils, *BCR::ABL*, *PDGFRA*, *PDGFRB*, and *FGFR1*, were negative. Given these observations, the patient was considered to have eosinophilia due to atopic dermatitis. Smear samples showed an increase in mature eosinophils, which were approximately 16 μm, which is twice the size of the red blood cells.

Celltac Data

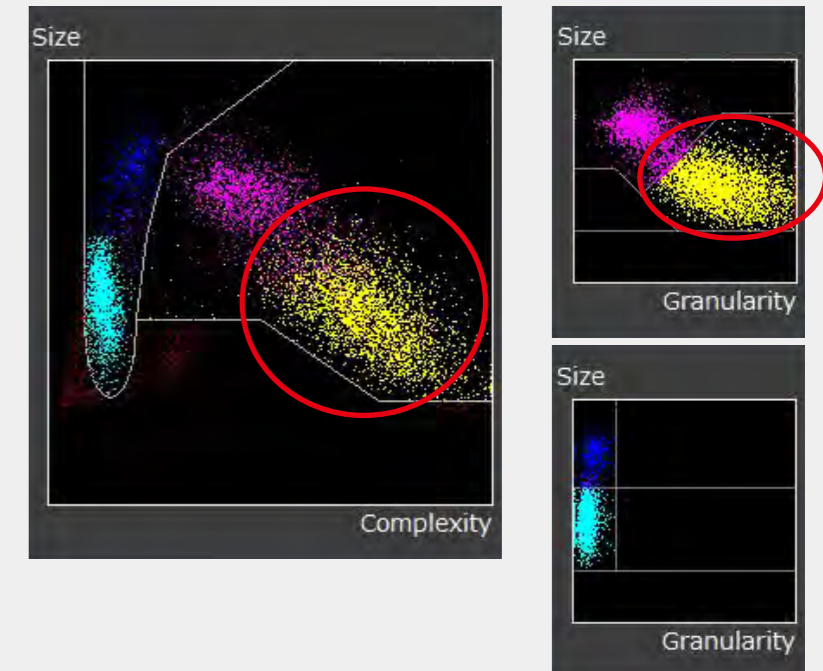
Numerical results

WBC	10.65	H	10 ³ /μL
RBC	4.19		10 ⁶ /μL
HGB	13.03		g/dL
HCT	37.7		%
MCV	90.0		fL
MCH	31.1		pg
MCHC	34.6		g/dL
RDW-CV	12.2		%
RDW-SD	43.9		fL
PLT	333.5		10 ³ /μL
PCT	0.32		%
MPV	9.5		fL
PDW	17.1		%
P-LCR	51.5		%
P-LCC	171.8	H	10 ³ /μL
NE	2.49	*	10 ³ /μL
LY	2.56		10 ³ /μL
MO	0.40		10 ³ /μL
EO	5.12	*	10 ³ /μL
BA	0.08		10 ³ /μL
NE%	23.37	*	%
LY%	24.05		%
MO%	3.74		%
EO%	48.08	*	%
BA%	0.76		%
RET	0.0335		10 ⁶ /μL
RET%	0.80		%
IRF	6.4		%
LFR	93.6		%
MFR	5.1		%
HFR	1.3		%

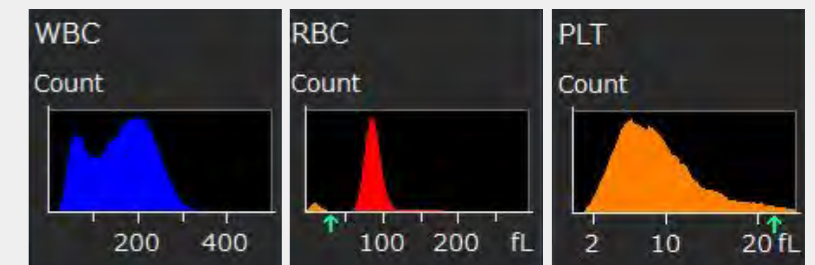
Flags

Morphological Flags	Numerical Flags
Ne-Eo Interference	Eosinophilia

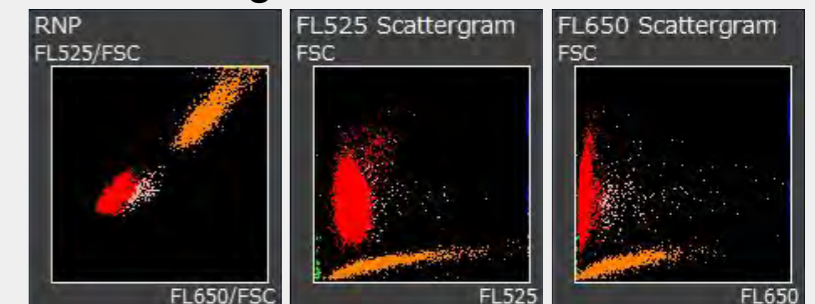
Scattergrams



Histograms



RET Scattergrams



Explanation of scattergram/histogram

A number of eosinophil plots were identified on the MAIN and NE-EO scattergrams (○), with the "Eosinophilia flag" indication.