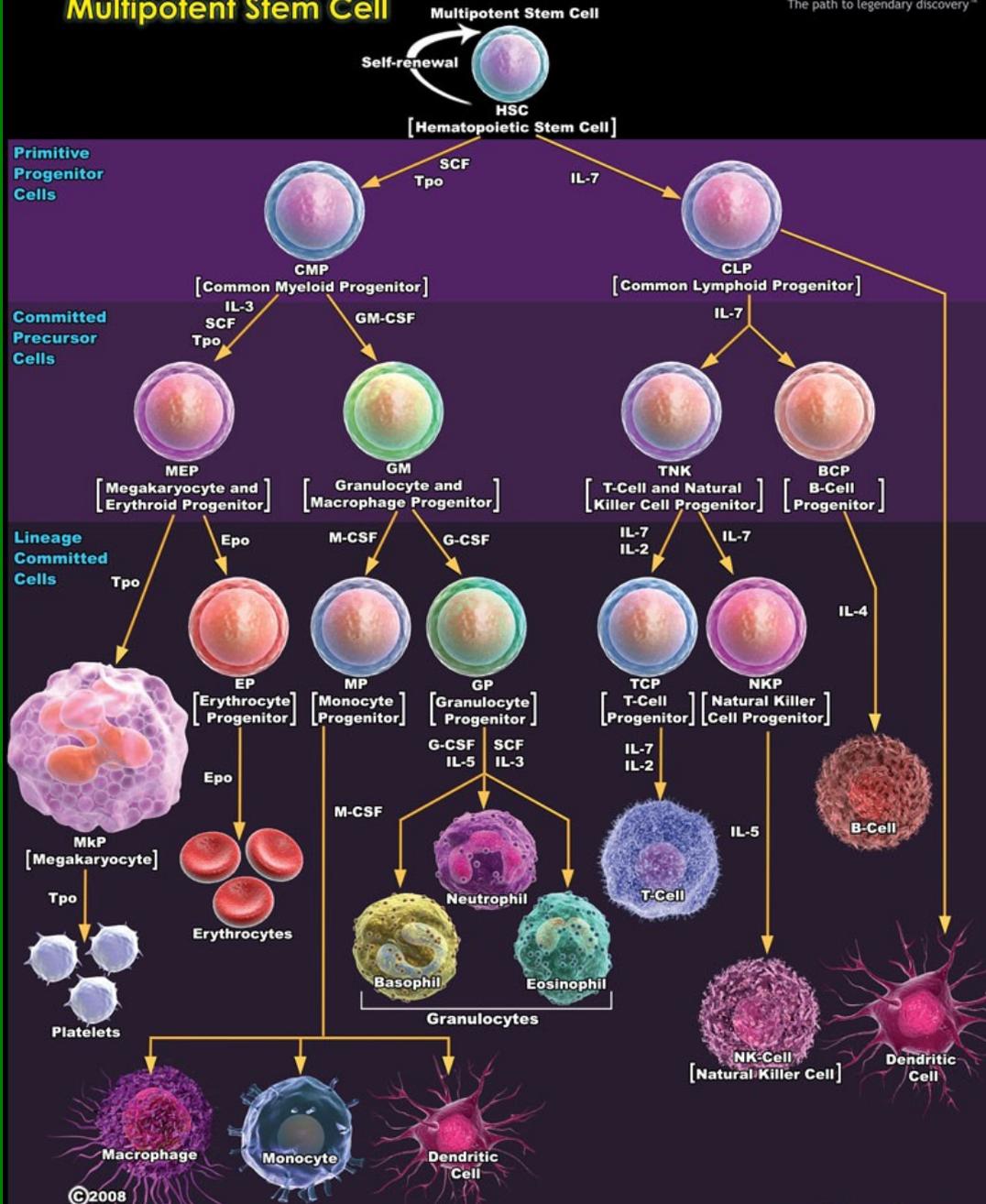
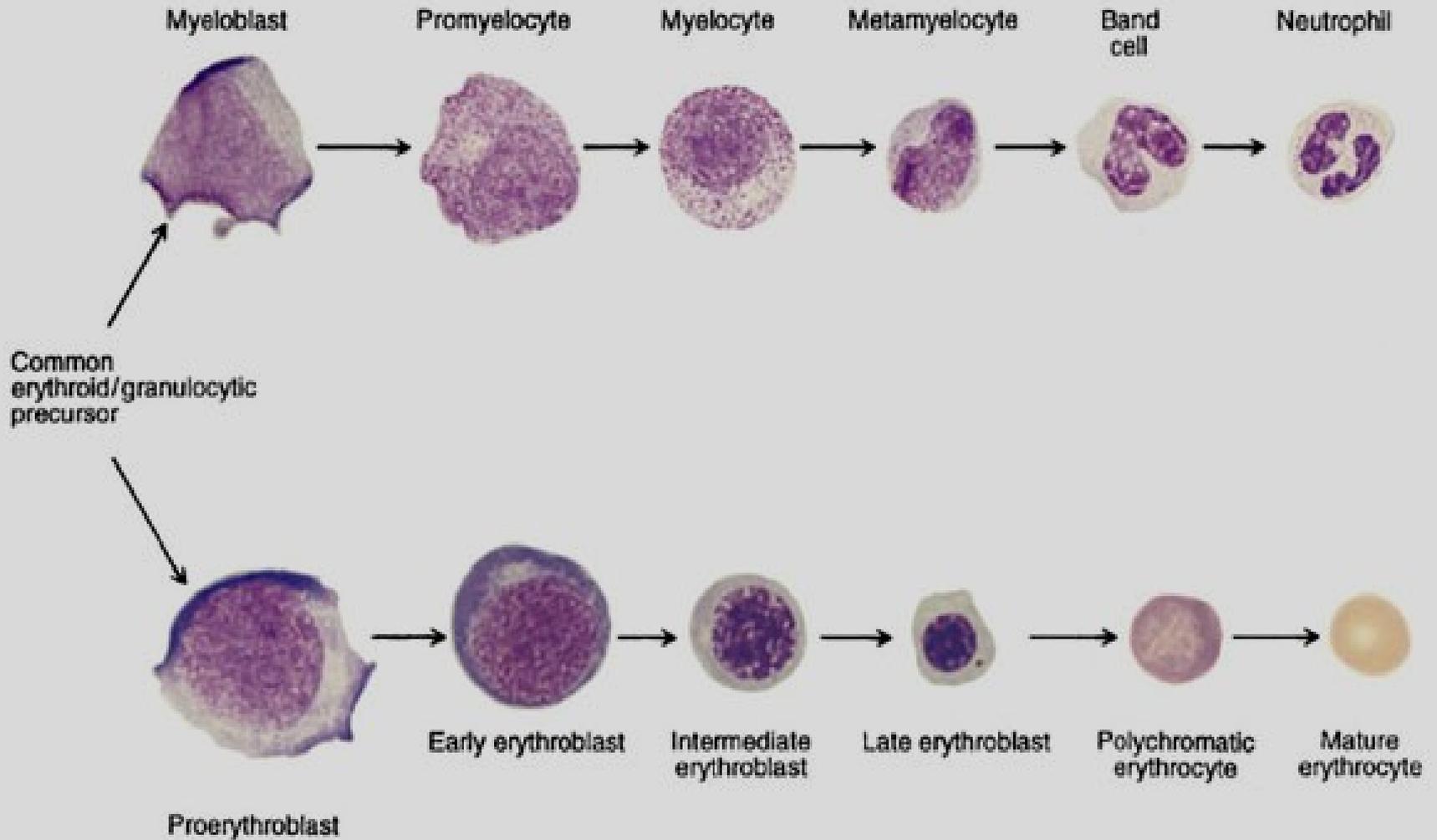


# Hematopoéza

Bourková L., OKH FN Brno

# Hematopoiesis from Multipotent Stem Cell



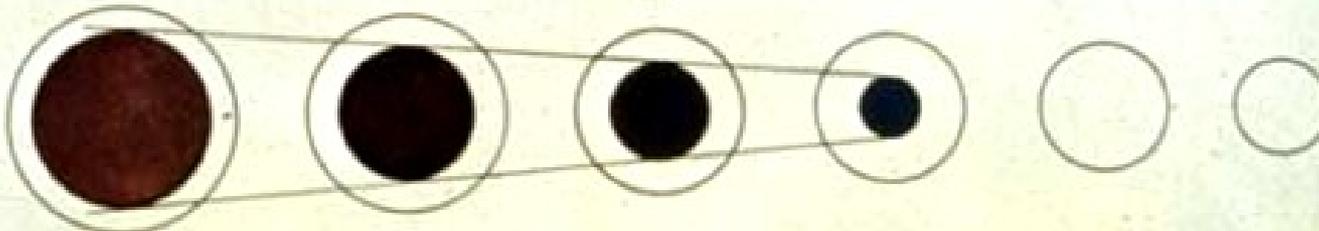


# Sledování buněčných morfologických změn



A Cell size and cytoplasm color

zbarvení, obsah  
cytoplazmy



B Nuclear size and color

velikost, tvar  
jádra



C Nuclear chromatin structure

struktura chromatinu,  
jadérka



D Composite (Left to right: Rubriblast, Pro-rubricyte, Rubricyte, Metarubricyte, Diffusely basophilic erythrocyte, Erythrocyte)

komplexní hodnocení

KOSTNÍ DŘEŇ

myeloblast

promyelocyt

neutrofilní myelocyt

eozinofilní myelocyt

bazofilní myelocyt

neutrofilní metamy

eozinofilní metamy

bazofilní metamy

proerythroblast

časný erythroblast  
(bazofilní normoblast)

středně zralý erythroblast  
(polychromní normoblast)

pozdní erythroblast  
(ortochromní normoblast)

monoblast

promonocyt

makrofág

magakaryoblast

promegakaryocyt

megakaryocyt

lymfoblast

prolymfocyt

plazmat. b.

PERIFERNÍ KREV

neutrofilní tyč

eozinofilní tyč

bazofilní tyčí

retikulocyt

monocyt

trombocyty

lymfocyt

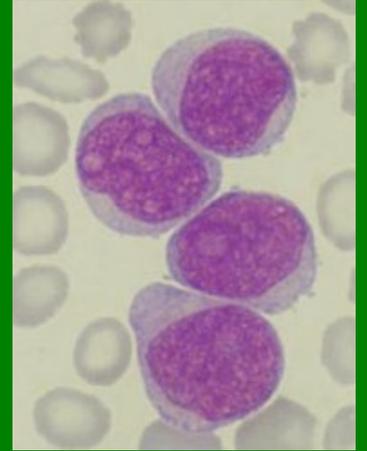
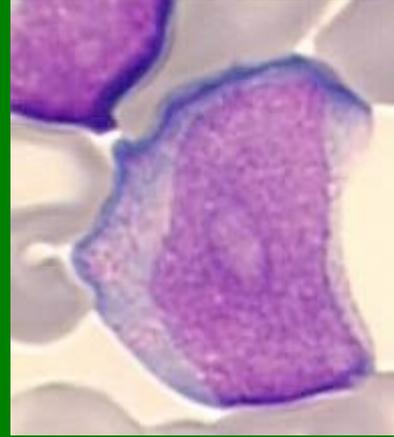
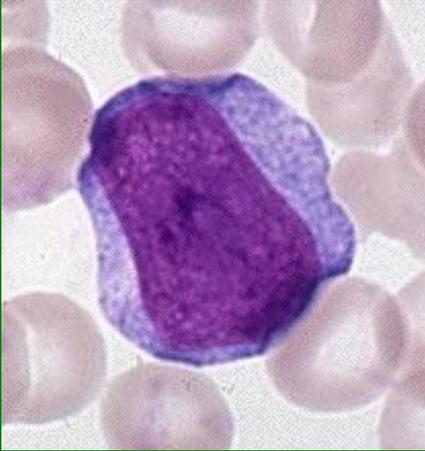
neutrofilní segment

eozinofilní segment

bazofilní segment

erythrocyt

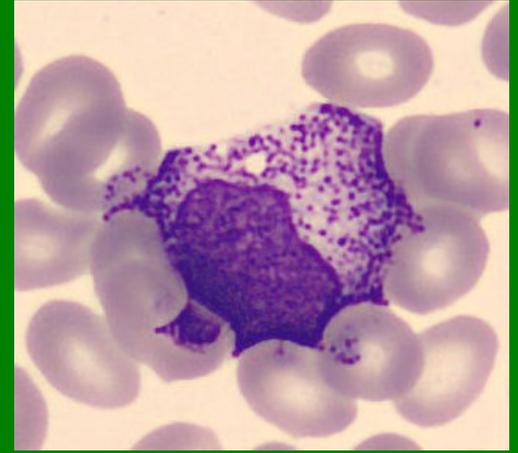
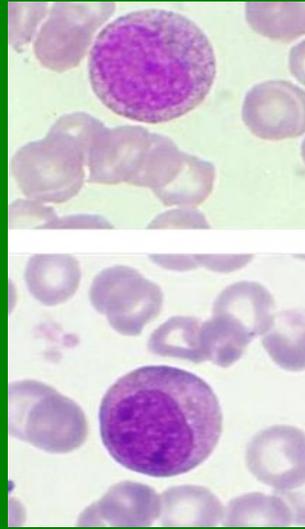
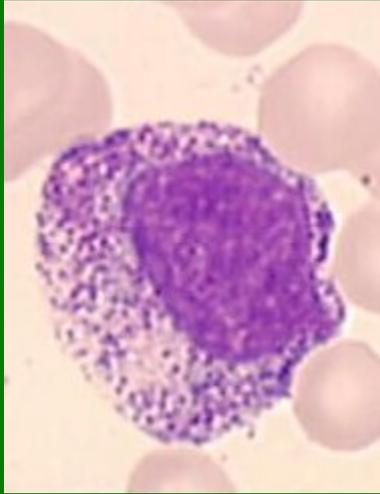
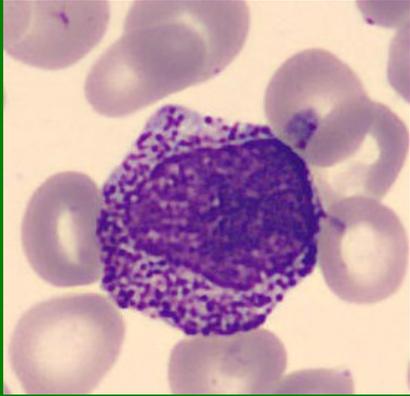
## Myeloblasty



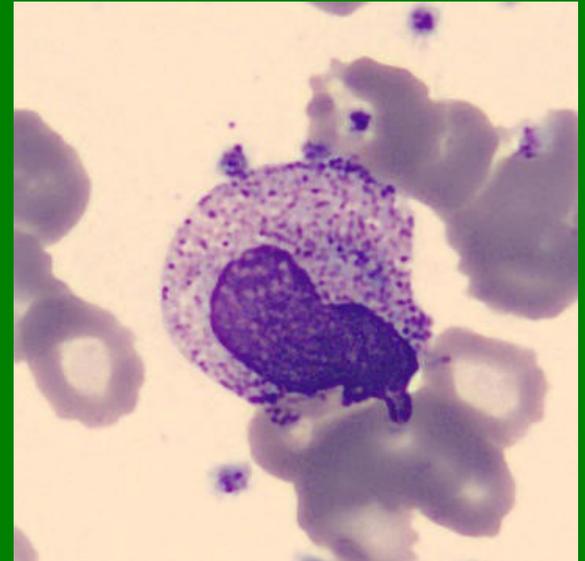
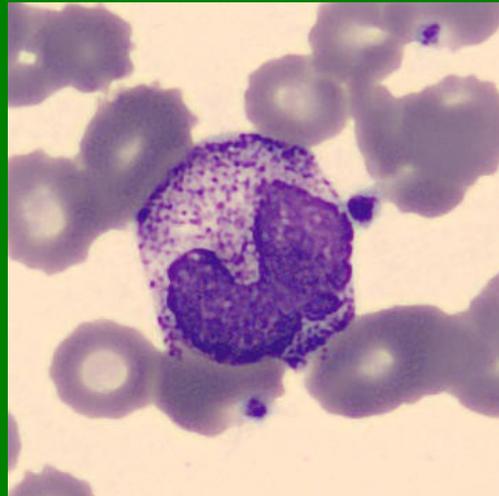
## Promyelocyty



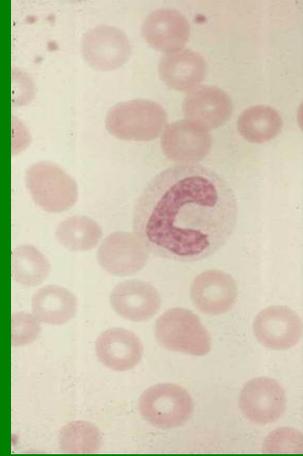
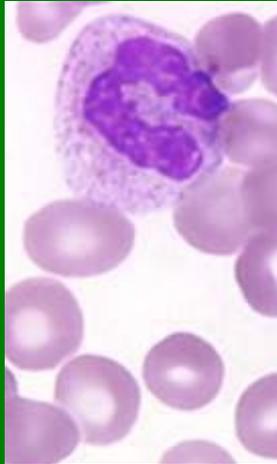
## Myelocyty - Ne



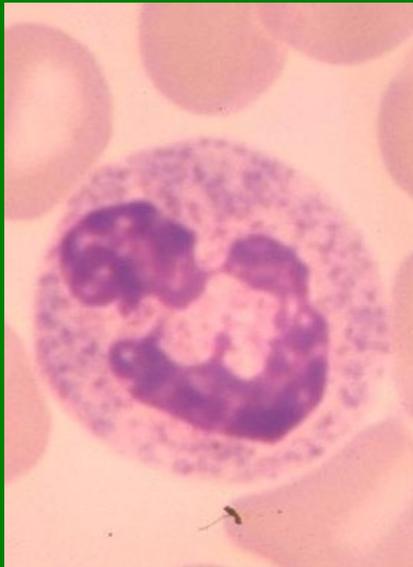
## Metamyelocyty - Ne



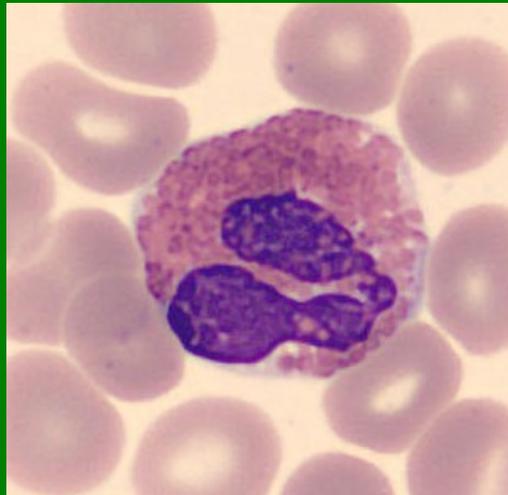
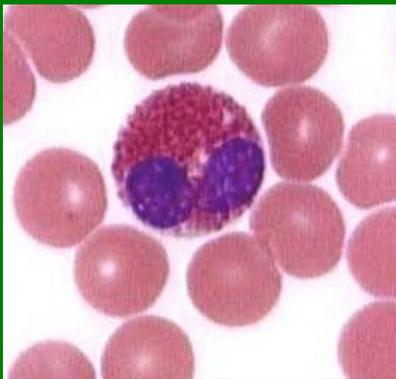
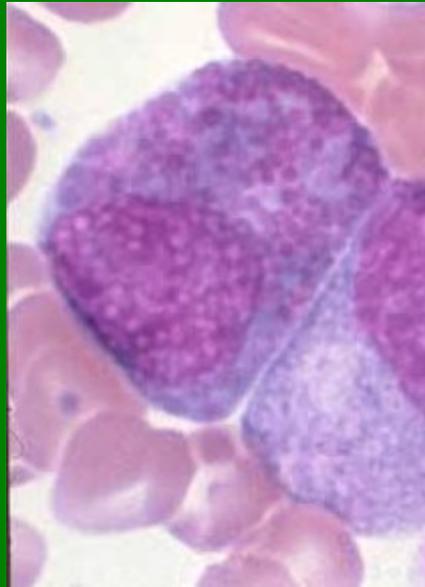
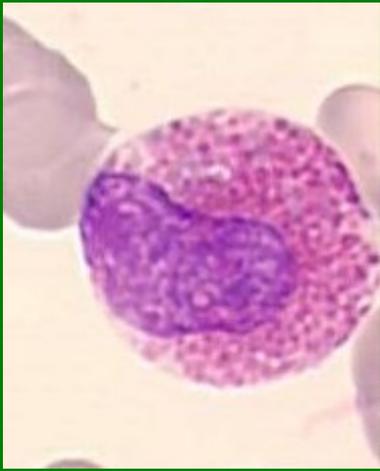
**Tyč – Ne** (rozdíl mezi nejširším a nejužším tvarem jádra je 1/3 až 1/2)



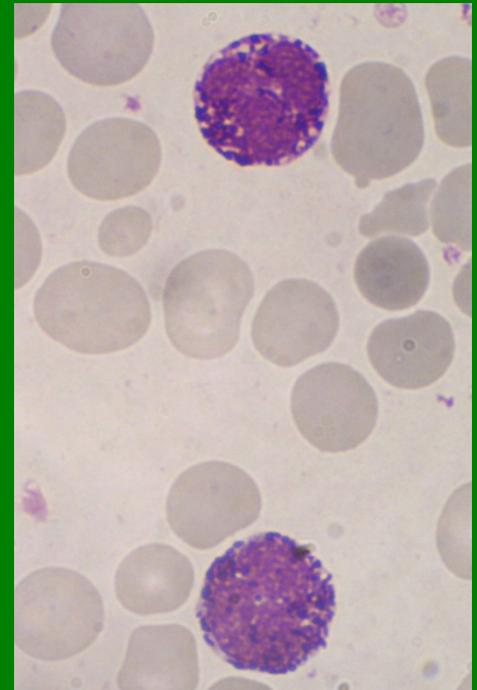
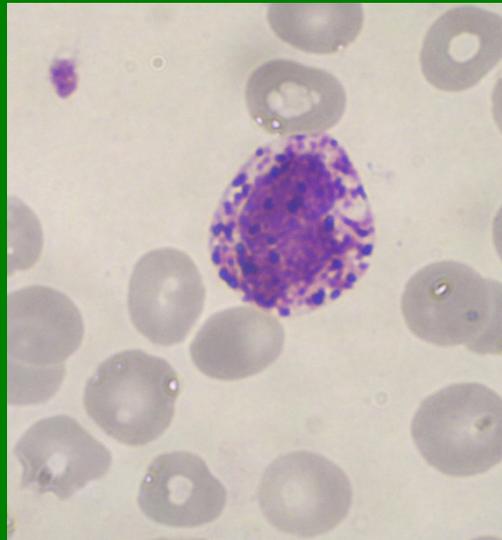
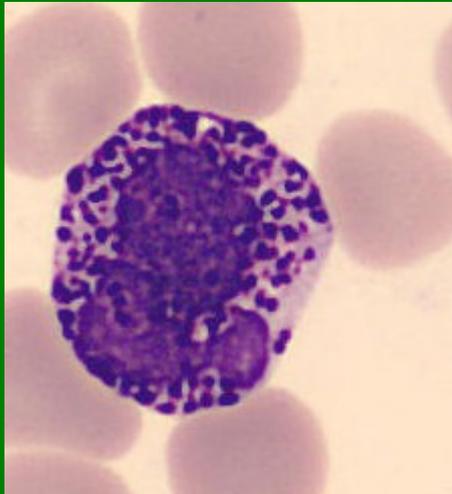
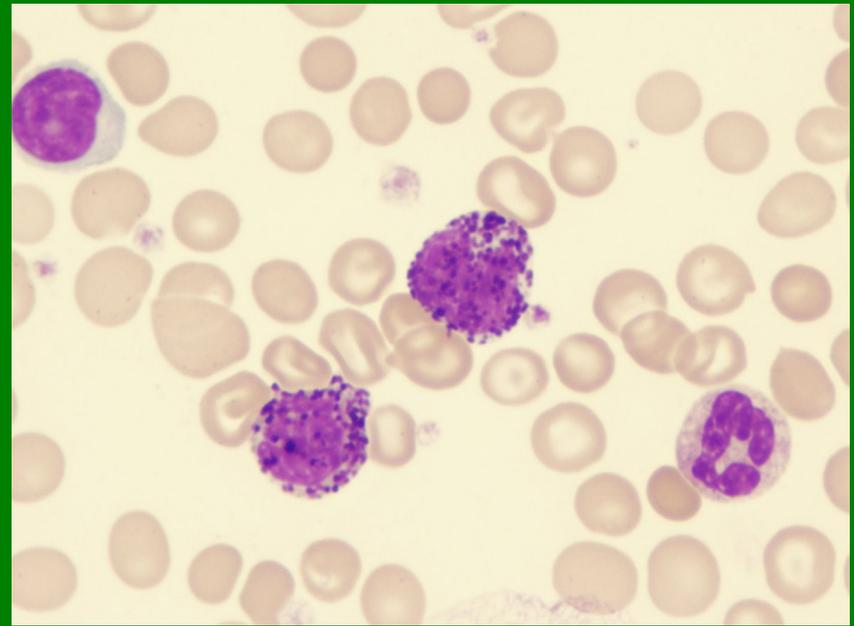
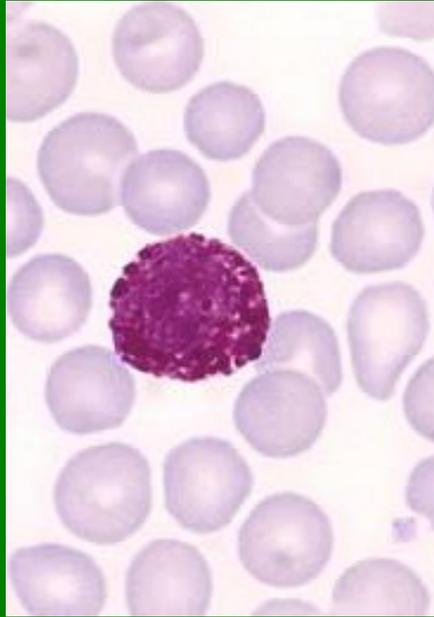
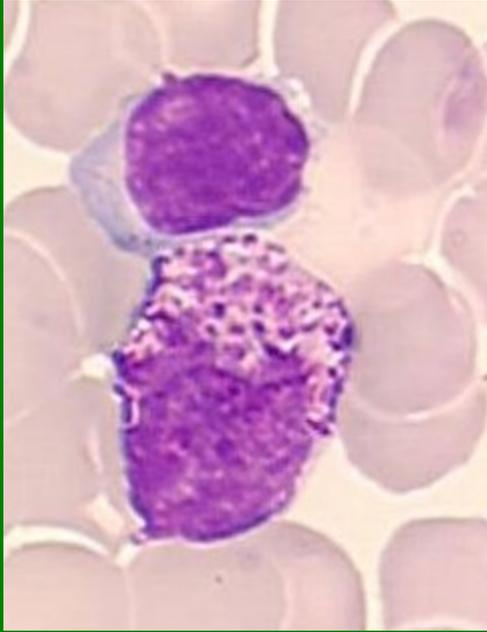
**Segment - Ne**



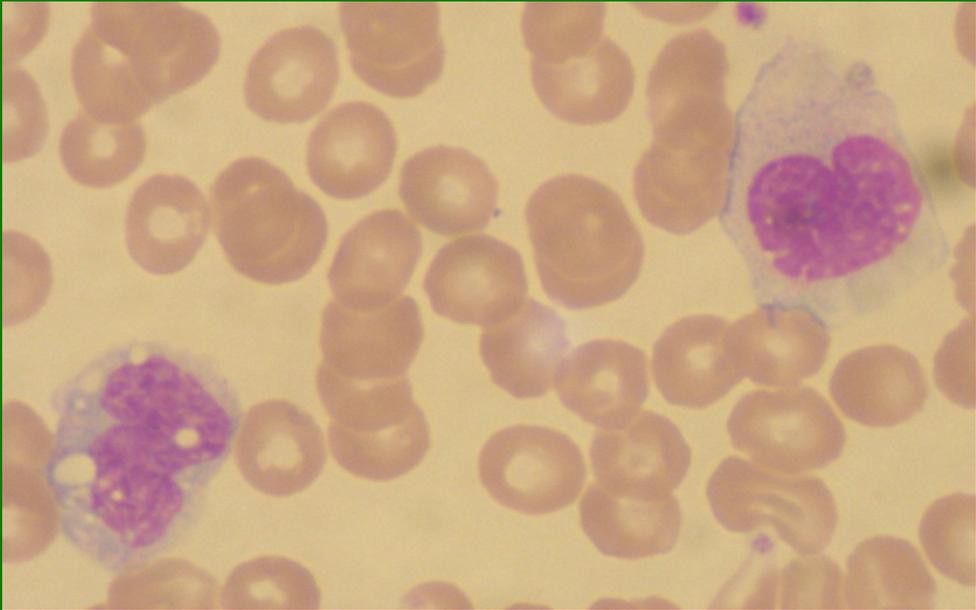
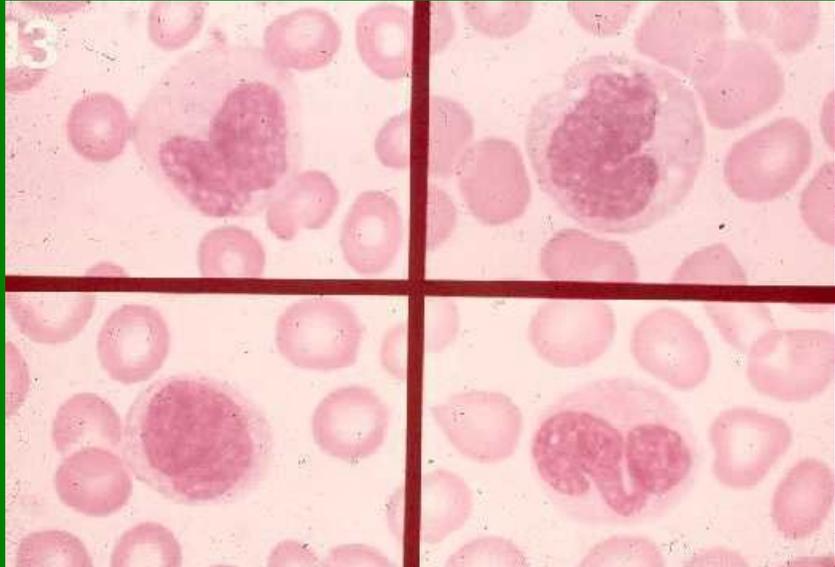
# Eozinofily



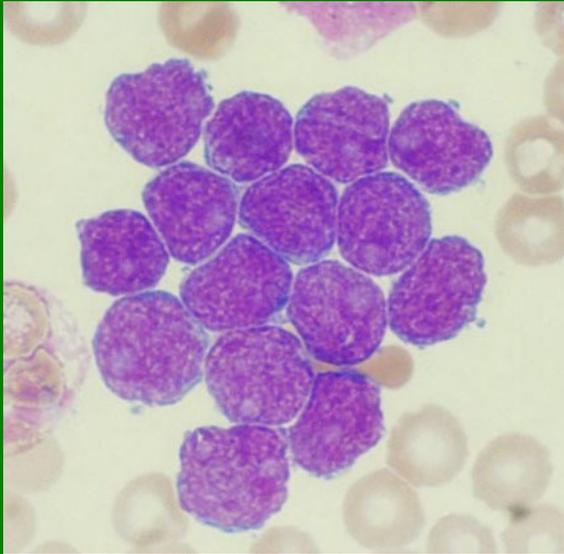
# Bazofily



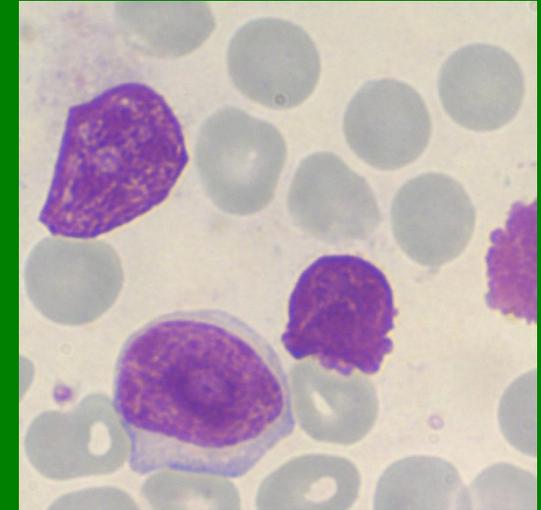
# Monocyty



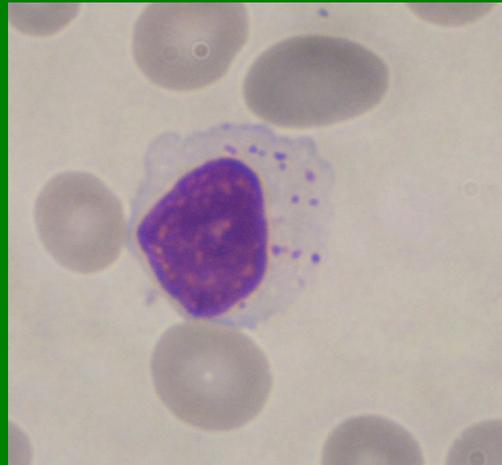
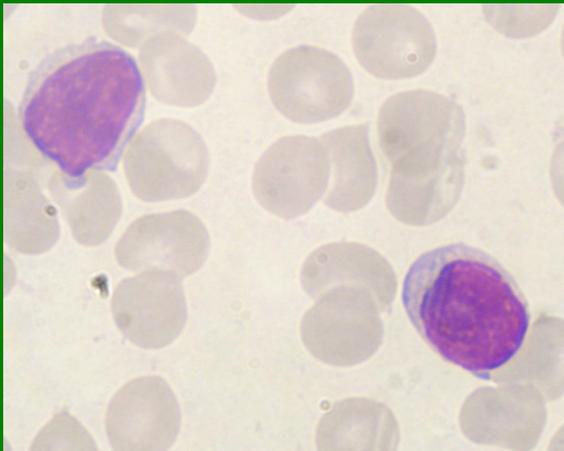
**Lymfoblasty**



**Prolymfocyt**



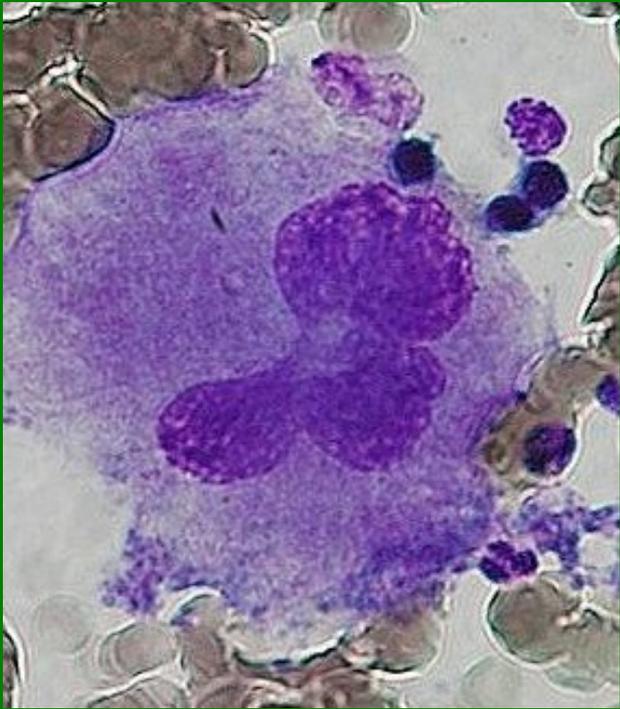
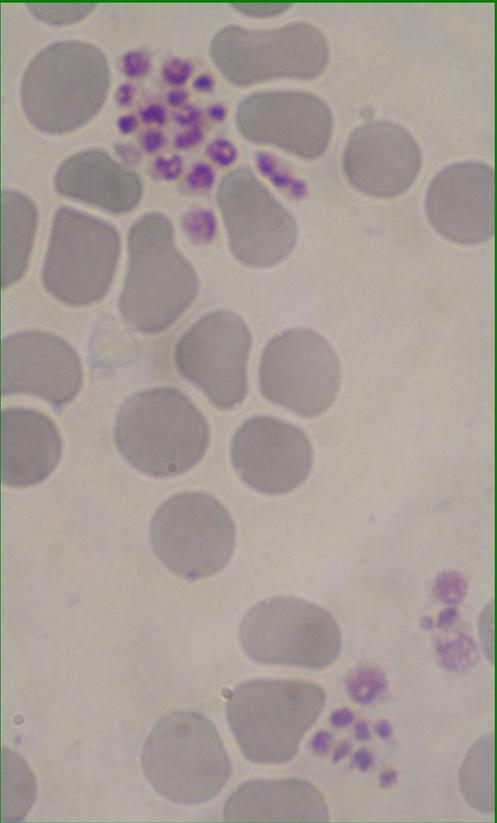
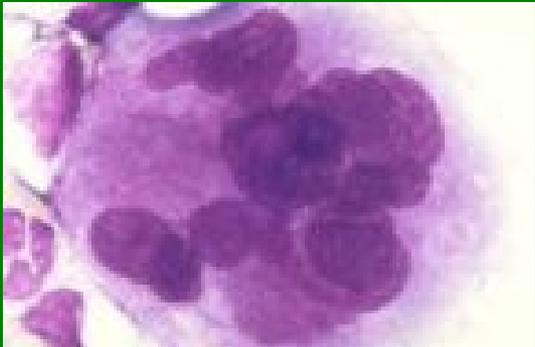
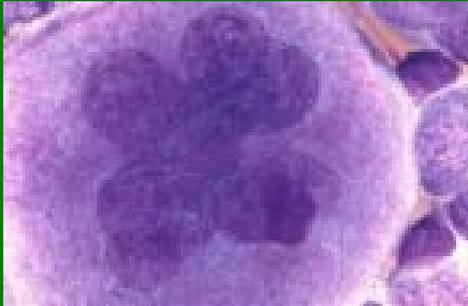
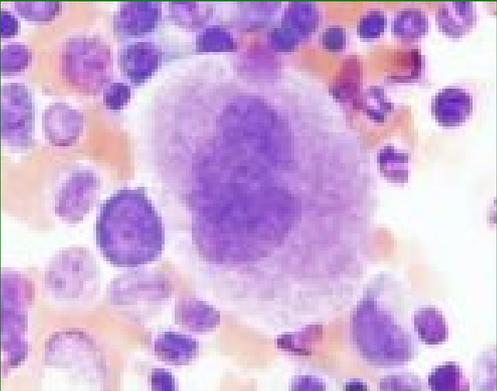
**Lymfocyty**



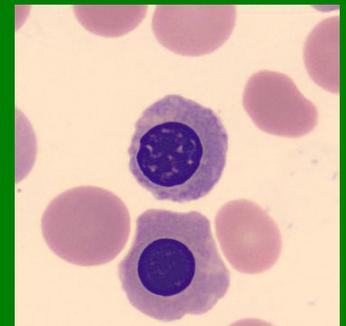
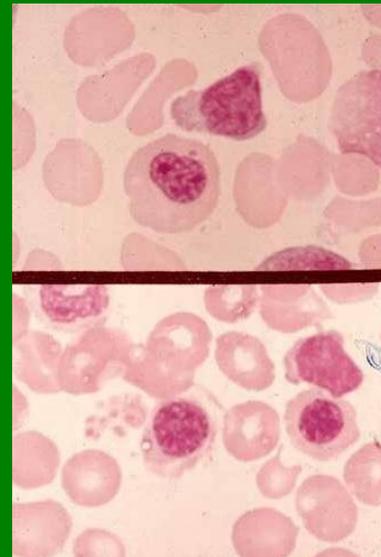
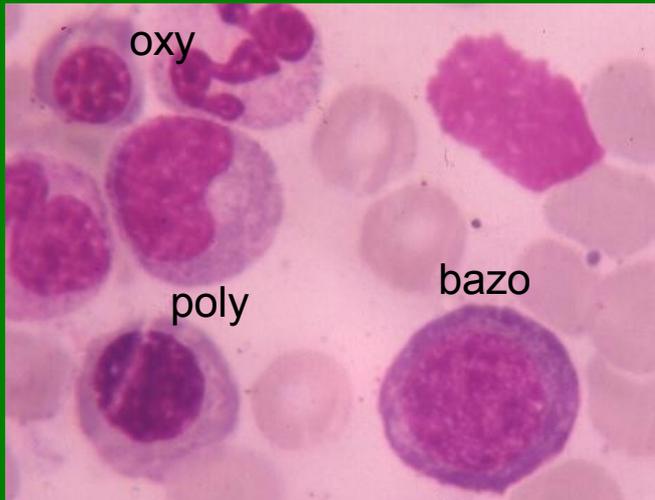
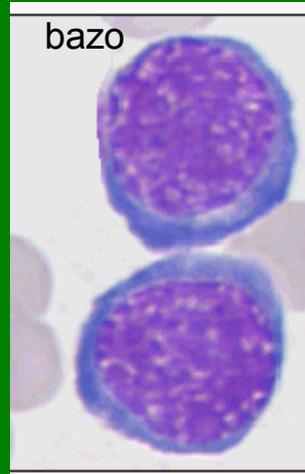
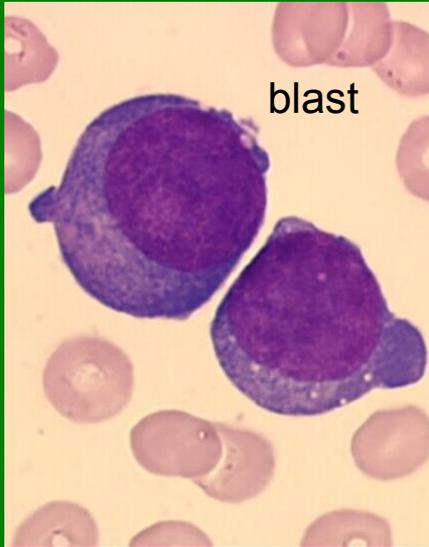
**Plazmatická buňka**



**Megakaryocyty, PLT**

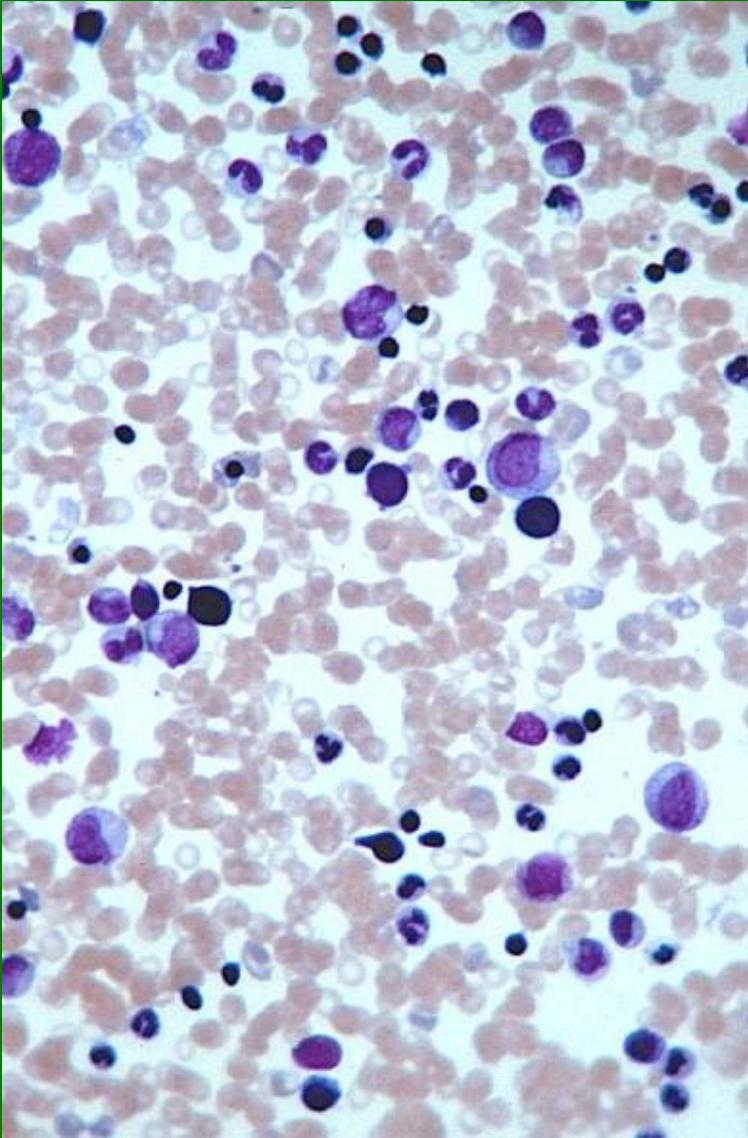


# NRBC



# Kostní dřeň - buněčnost

normální



vysoká

