

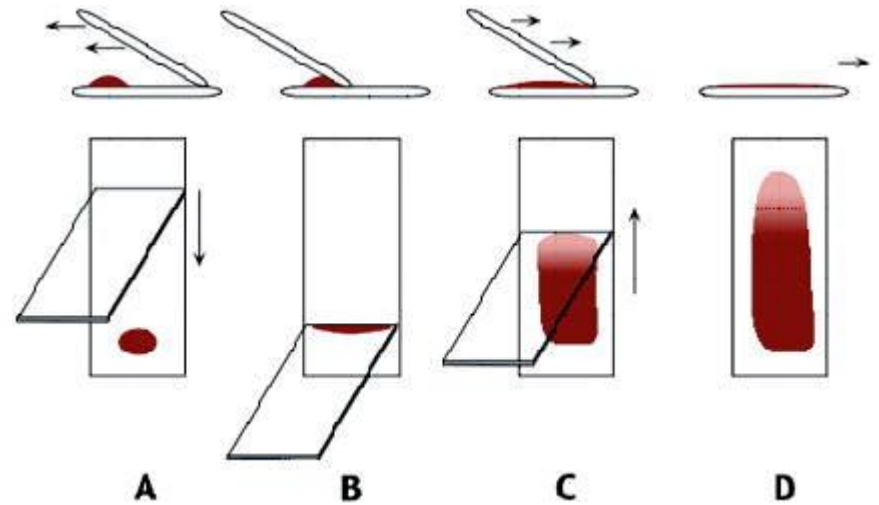
# Blood Tissue and Bone Marrow

## Practise for Histology

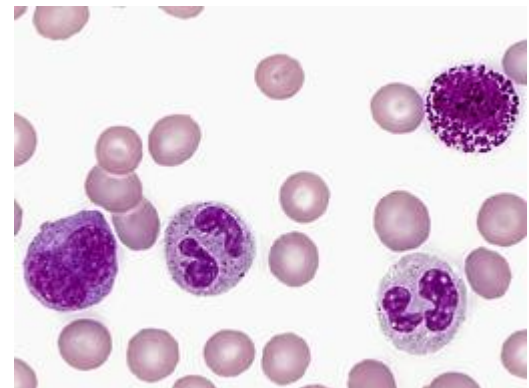
Acc. Prof. Dr. Sinan OZKAVUKCU

# Blood smear

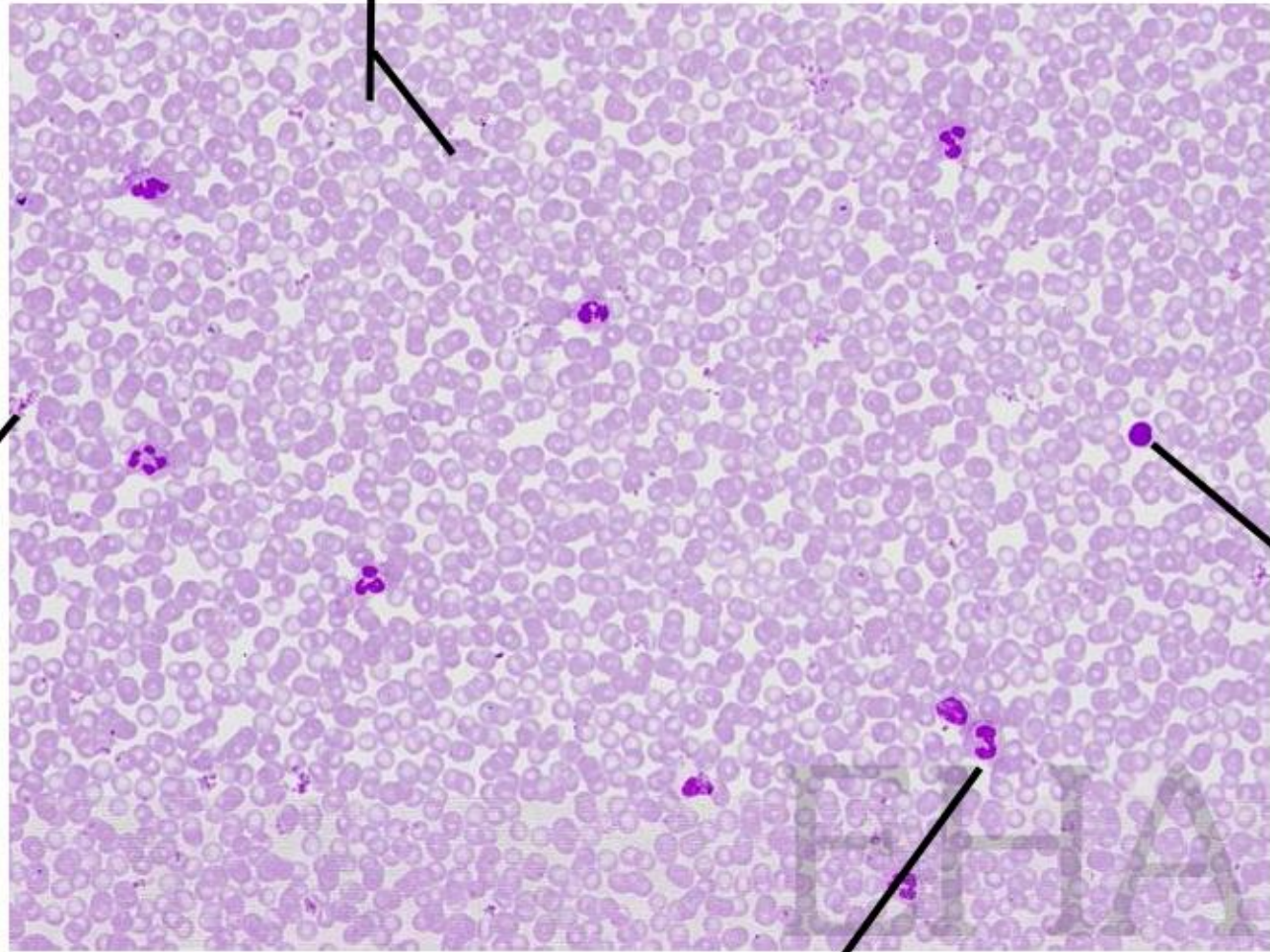
- The easiest method used in the examination of blood cells
- A drop of blood is placed directly on a glass slide and spread over its surface with the edge of another slide.
- After air drying, it is stained with modified Romanovsky type staining mixtures (Wright or Giemsa).
- Methylene blue (basic dye)
- Azure (basic dye)
- Eosin (acidic dye)



The granules of leukocytes can be distinguished as they have different staining properties (nuclei and basophil granules receive basic dyes)



eritrositler



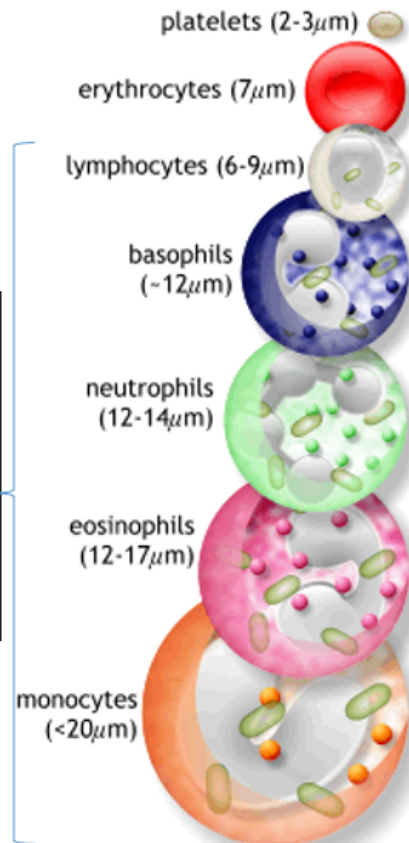
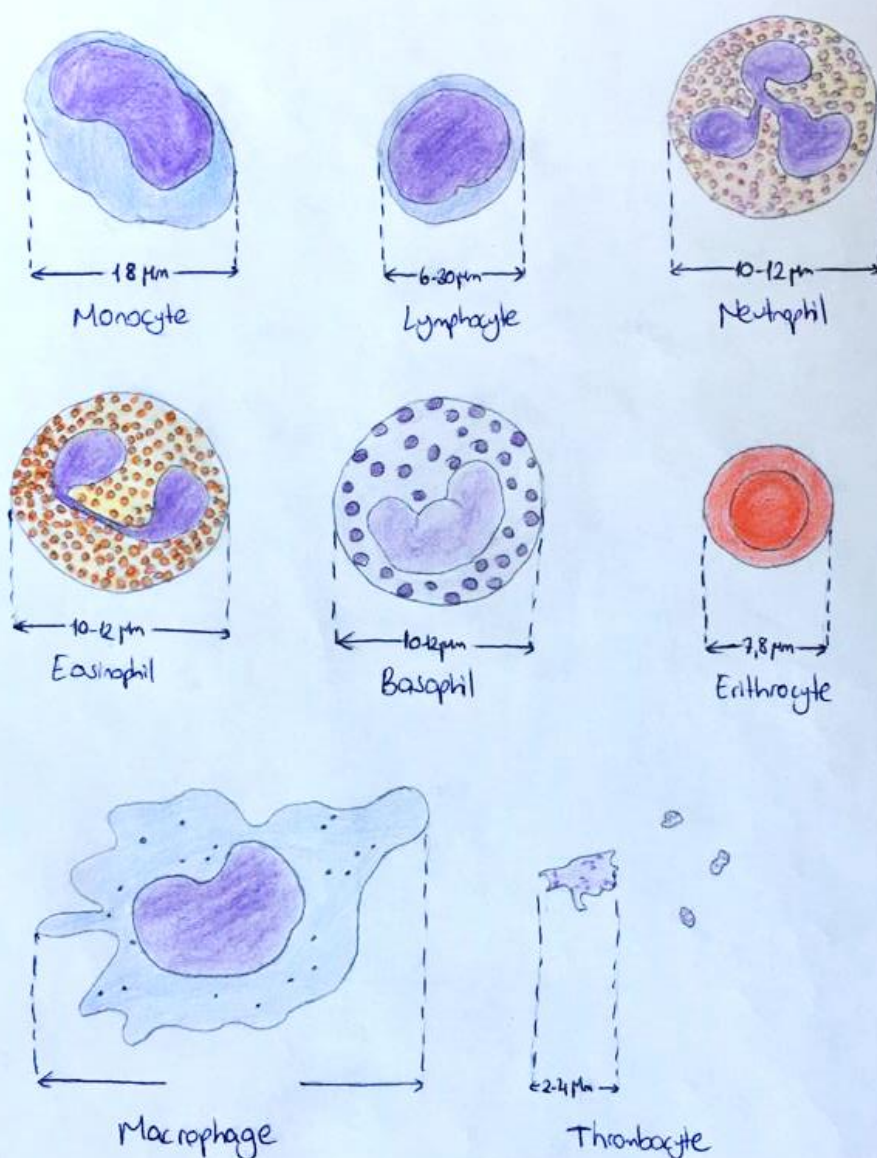
platelets

lymphocyte

neutrophils

## CELLS

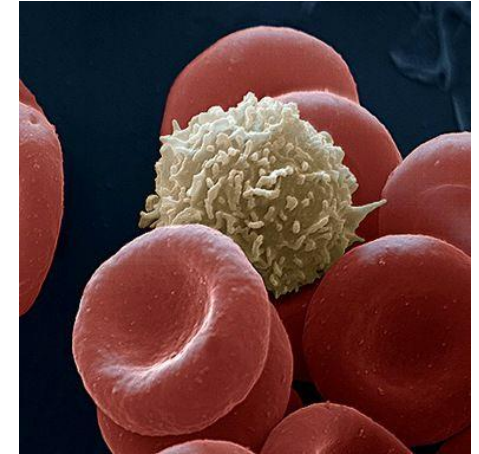
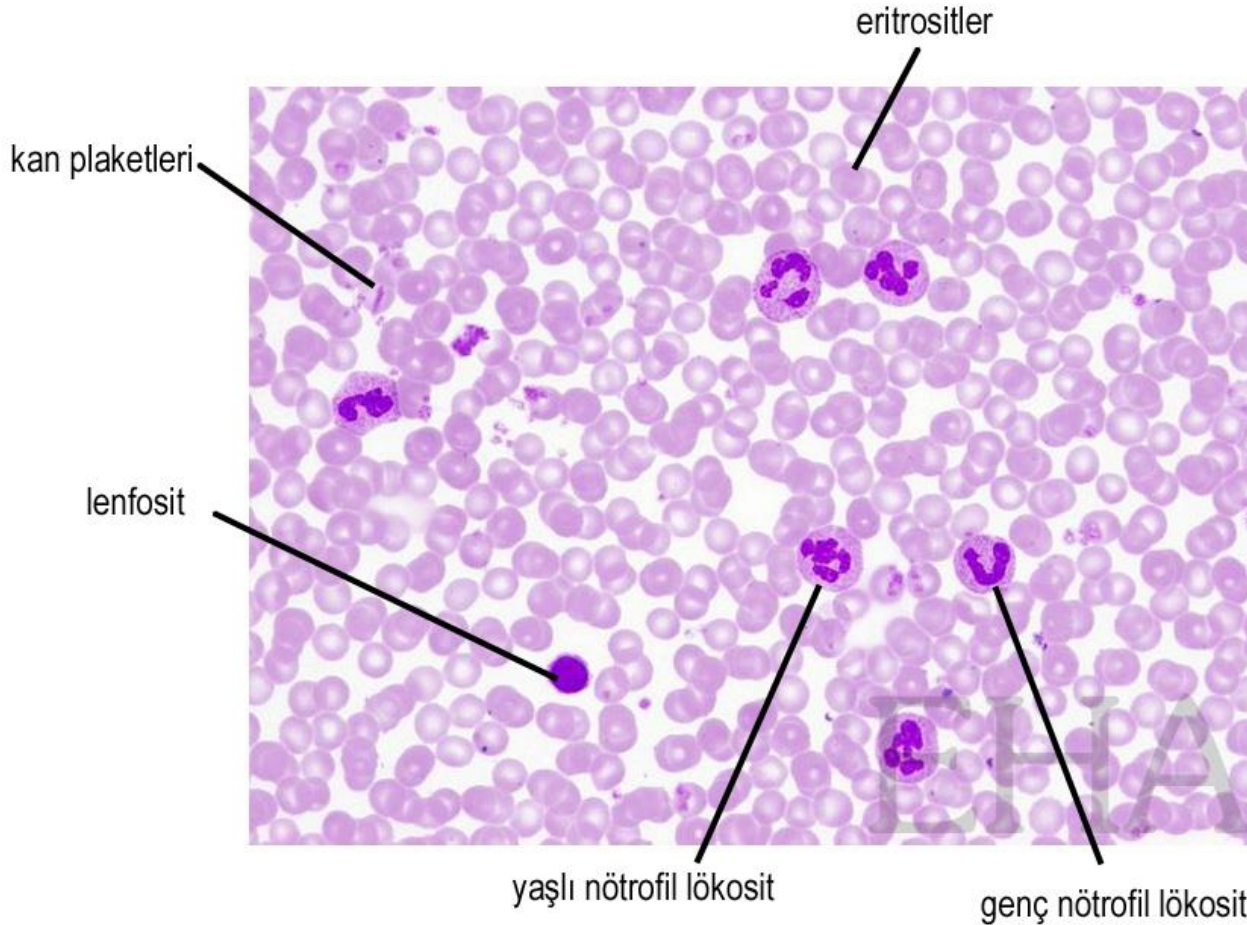
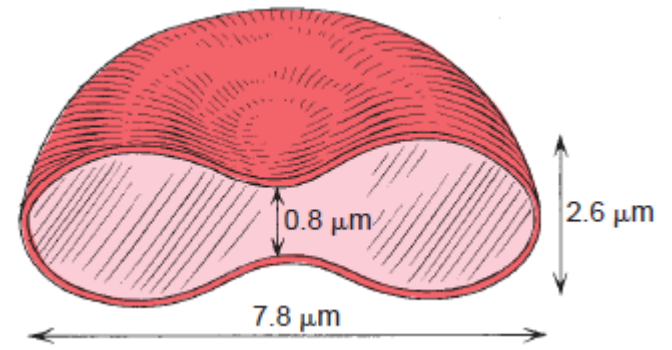
- Erythrocytes → Red Blood Cells (RBC)
- Leukocytes → White Blood Cells (WBC)
- Thrombocytes → Platelets



- Leukocytes:
  - Agranulocytes
    - Lymphocytes
    - Monocytes
  - Granulocytes
    - Neutrophils
    - Basophils
    - Eosinophils



# Erythrocytes



Doku : Kan Yaması  
Tür : İnsan  
Boya : Giemsa

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# Leukocytes

- Agranulocytes
  - Lymphocytes
  - Monocyte
- Granulocytes
  - Neutrophils
  - Eosinophils
  - Basophils

Lymphocyte: (6-9 $\mu$ m)



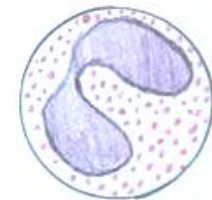
Monocyte: (18 $\mu$ m)



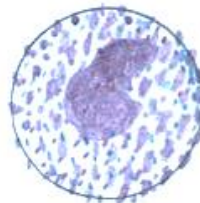
Neutrophil: (12-14 $\mu$ m)



Eosinophil: (12-17 $\mu$ m)



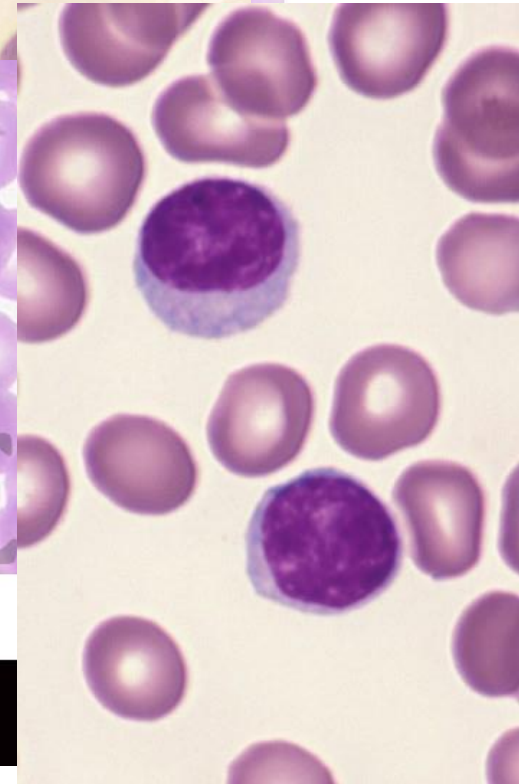
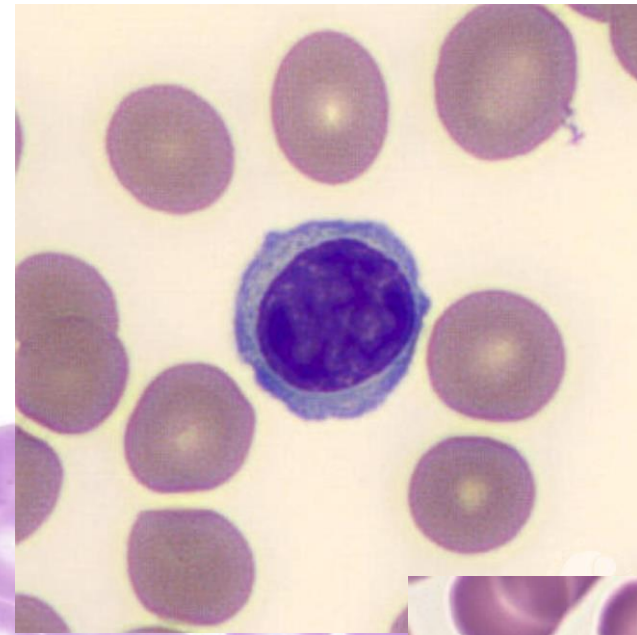
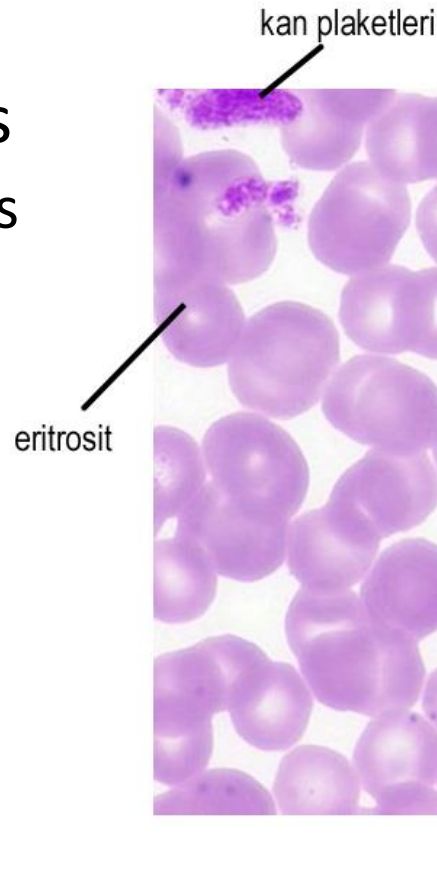
Basophil: (~12 $\mu$ m)



Tanberk KOÇAK

# Leukocytes

- Agranulocytes
  - Lymphocytes
  - Monocyte
- Granulocytes
  - Neutrophils
  - Eosinophils
  - Basophils

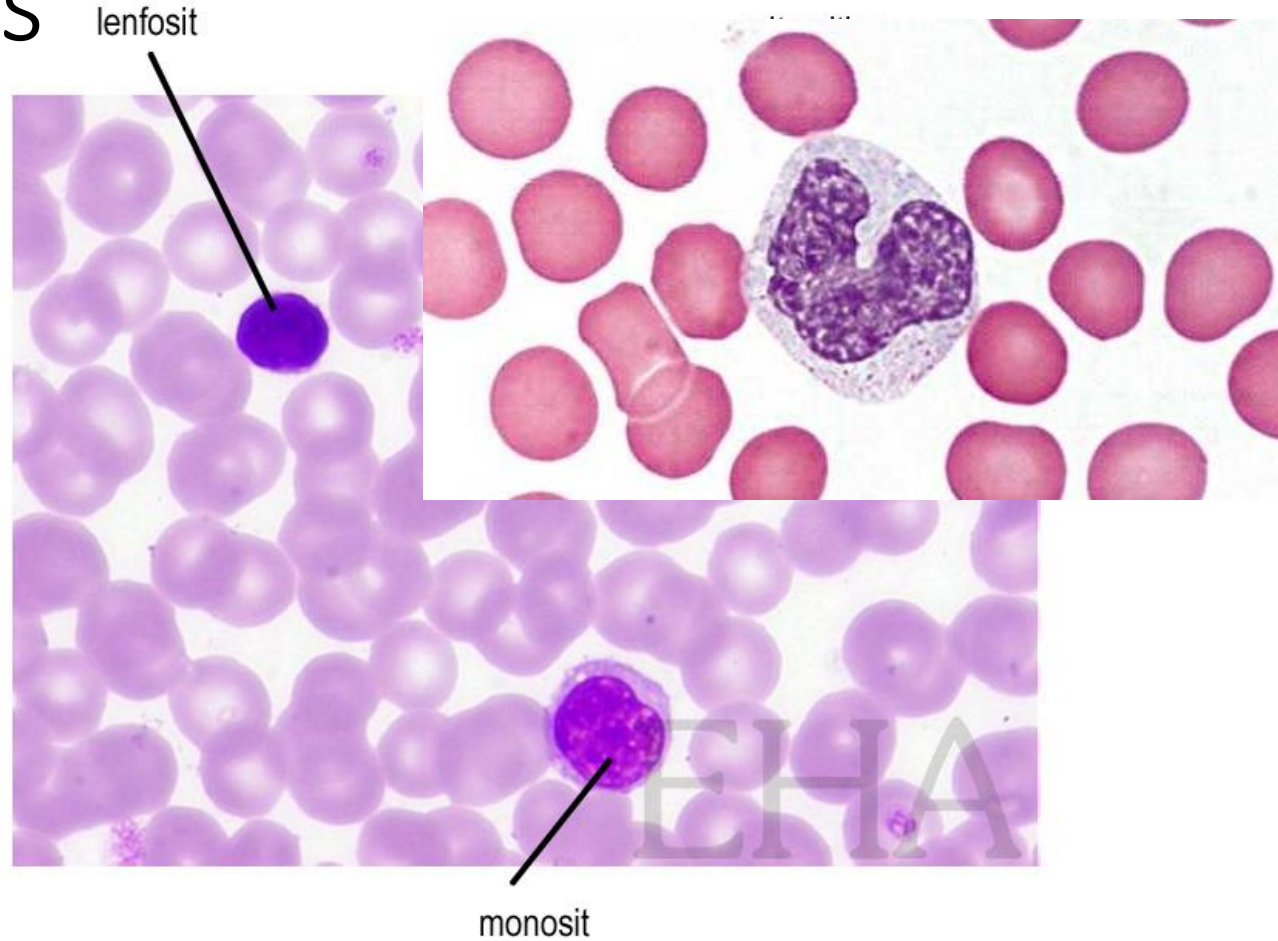


Doku : Kan Yayması  
Tür : İnsan  
Boya : Giemsa



# Leukocytes

- Agranulocytes
  - Lymphocytes
  - Monocyte
- Granulocytes
  - Neutrophils
  - Eosinophils
  - Basophils



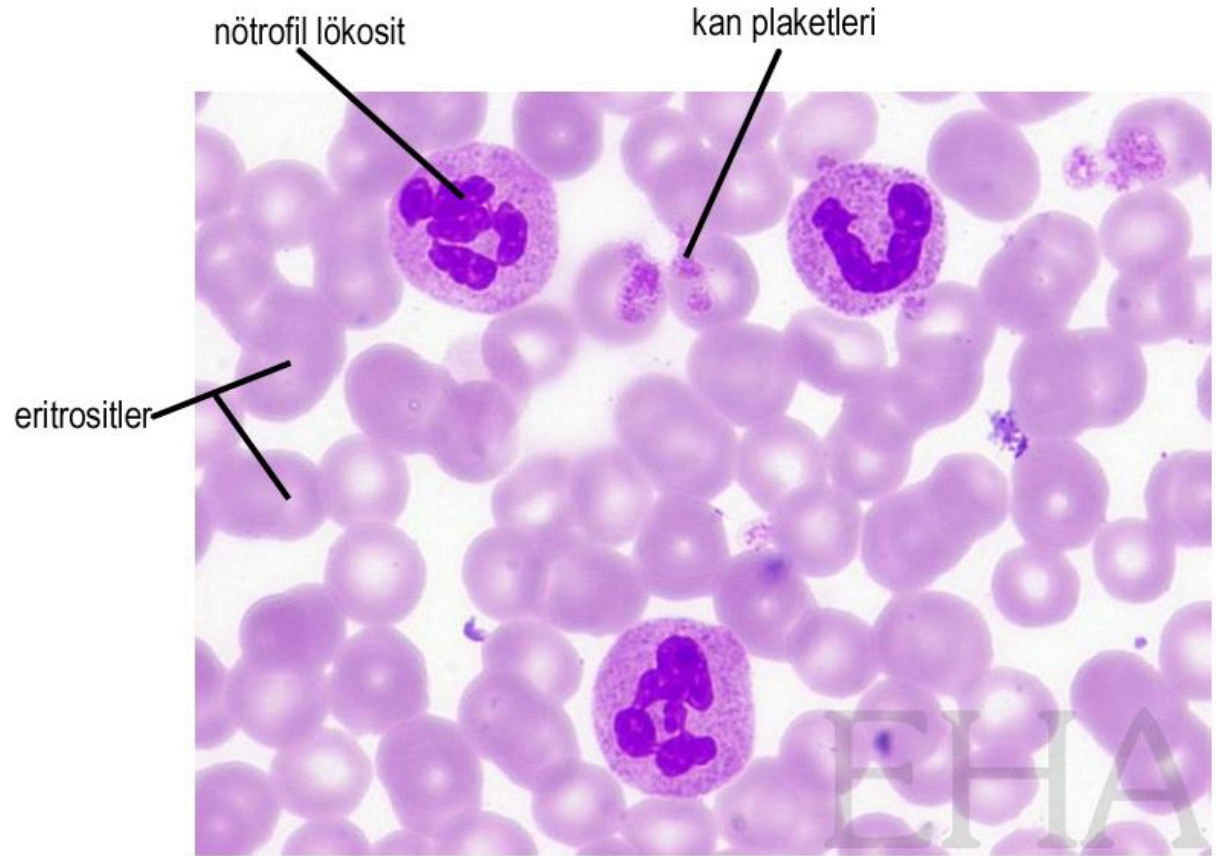
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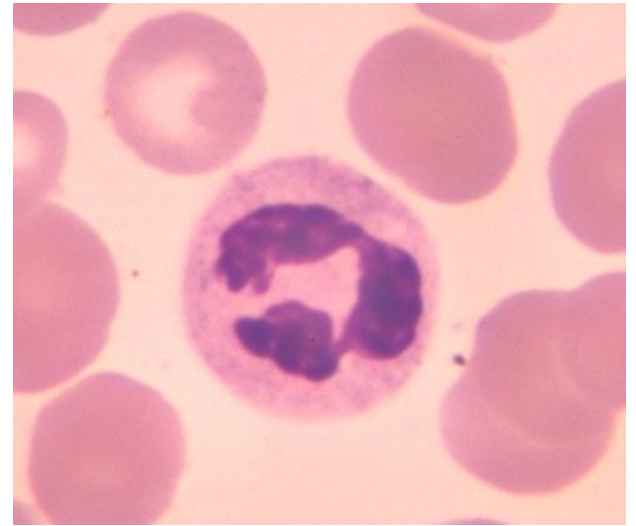
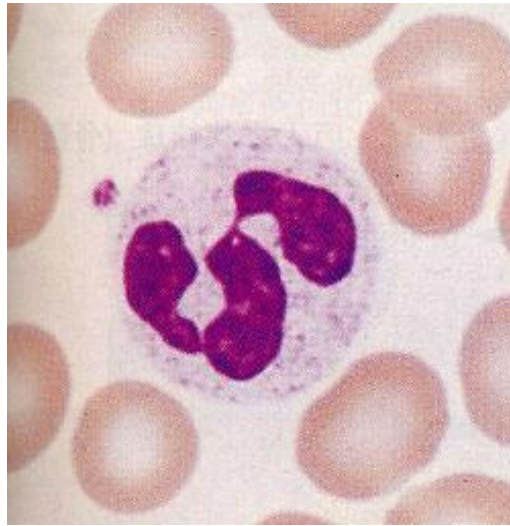
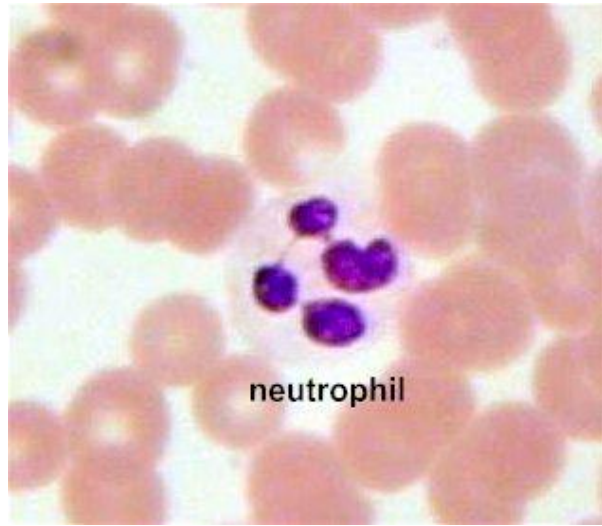
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# Lökositler

- Agranulocytes
  - Lymphocytes
  - Monocyte
- Granulocytes
  - Neutrophils
  - Eosinophils
  - Basophils





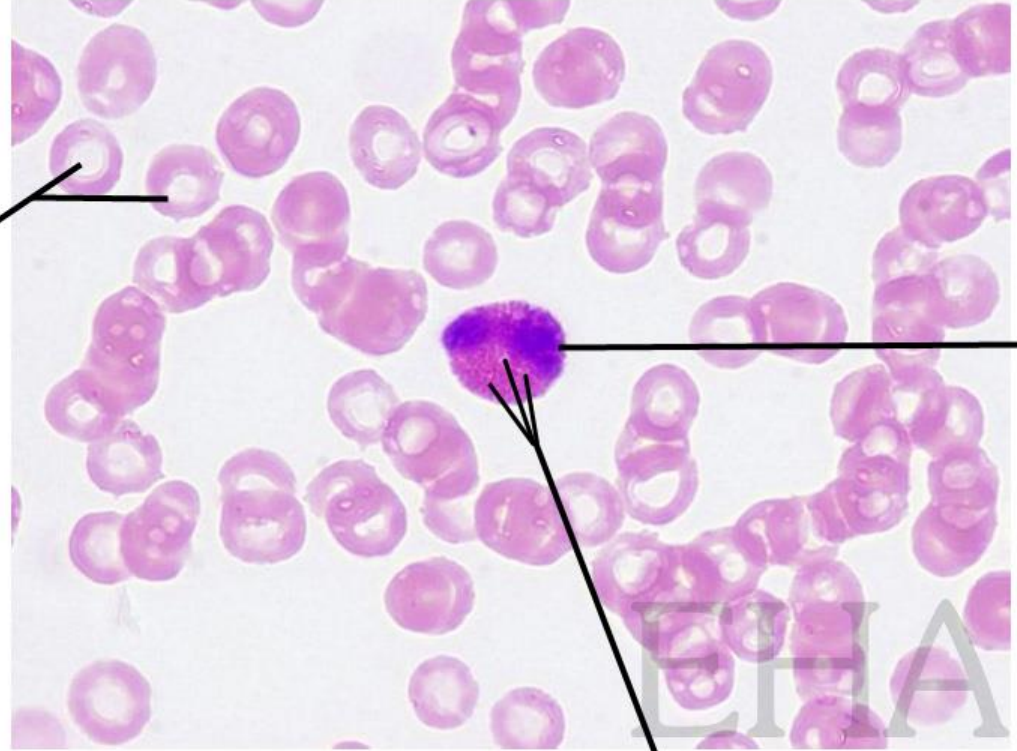
# Leukocytes

- Agranulocytes

- Lymphocytes
- Monocyte

- Granulocytes

- Neutrophils
- Eosinophils
- Basophils



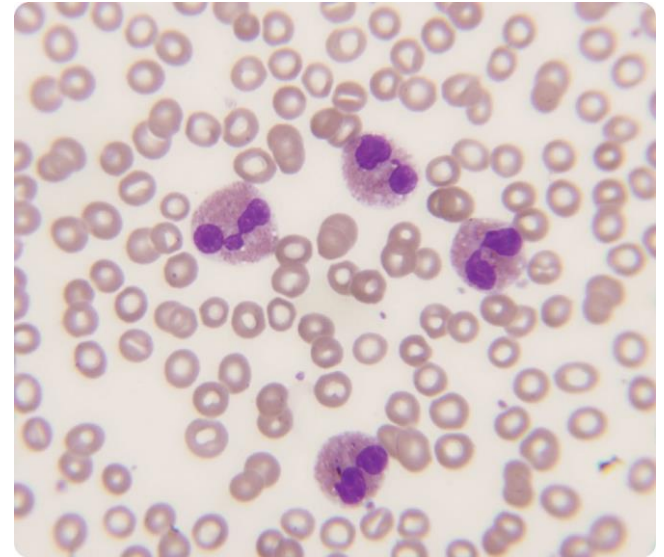
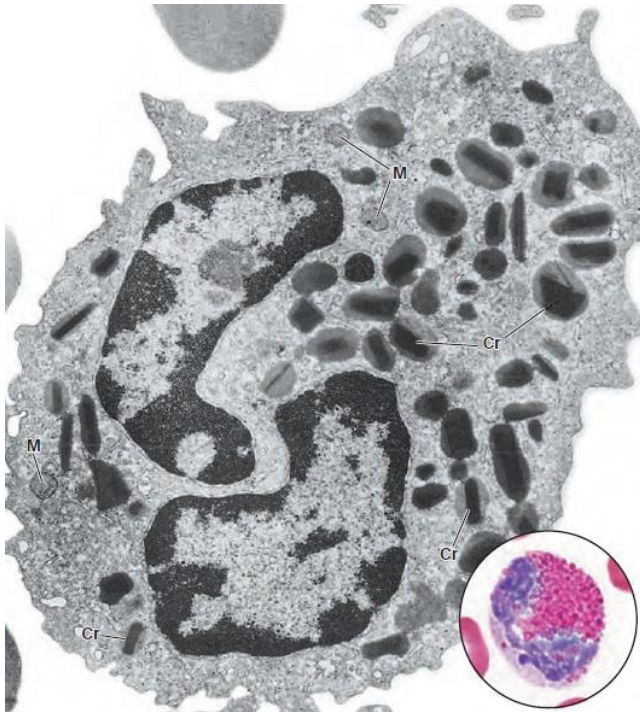
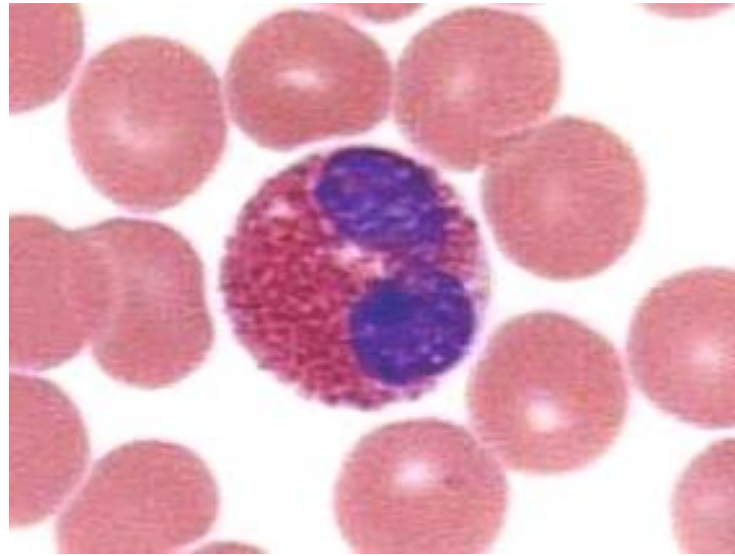
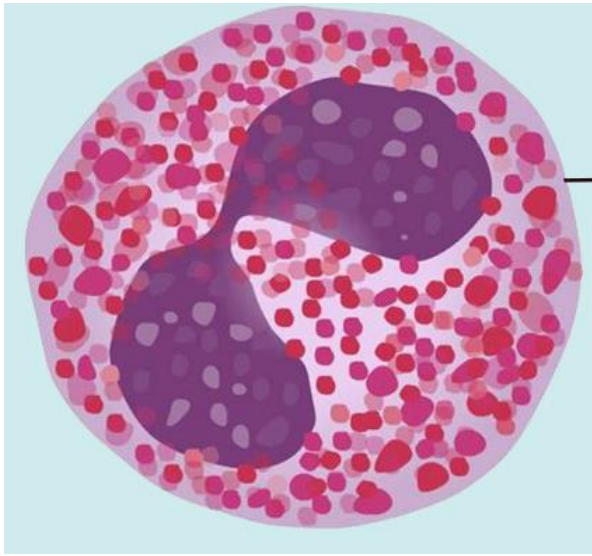
eozinofil lökosit

salgı kesecikleri

Doku : Kan Yaması  
Tür : İnsan  
Boya : Giemsa

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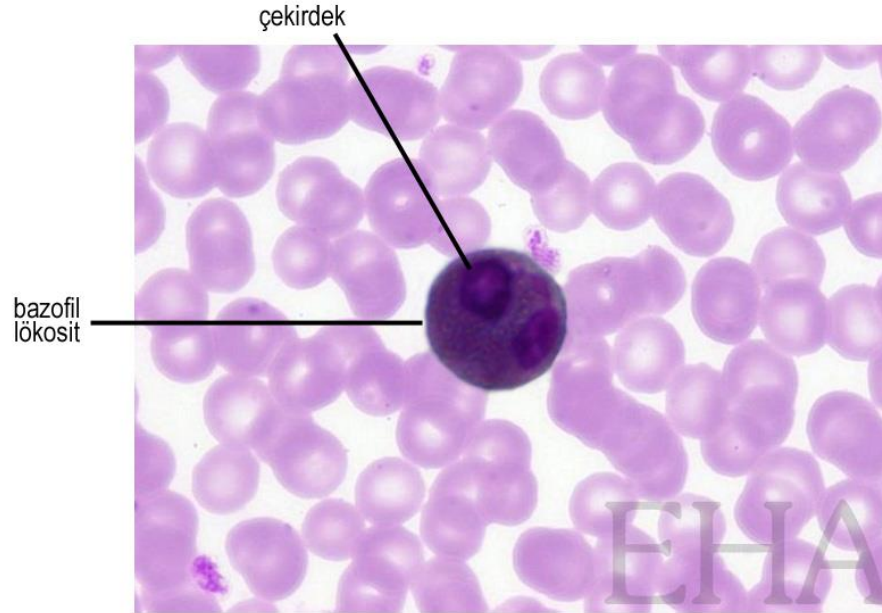






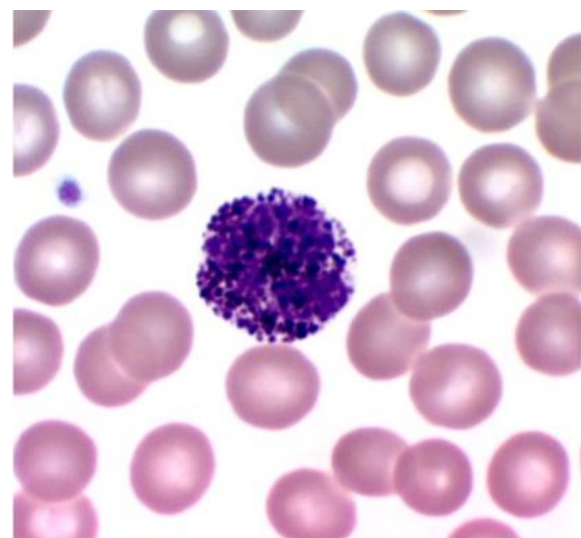
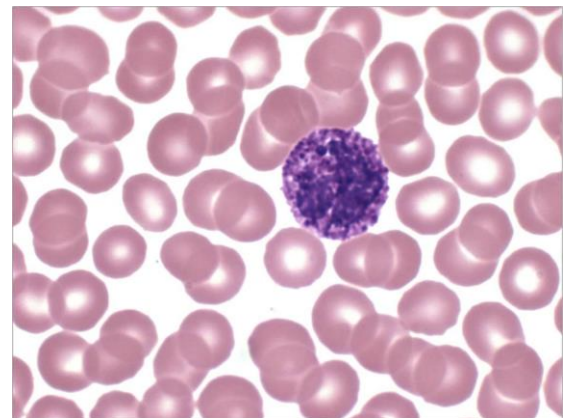
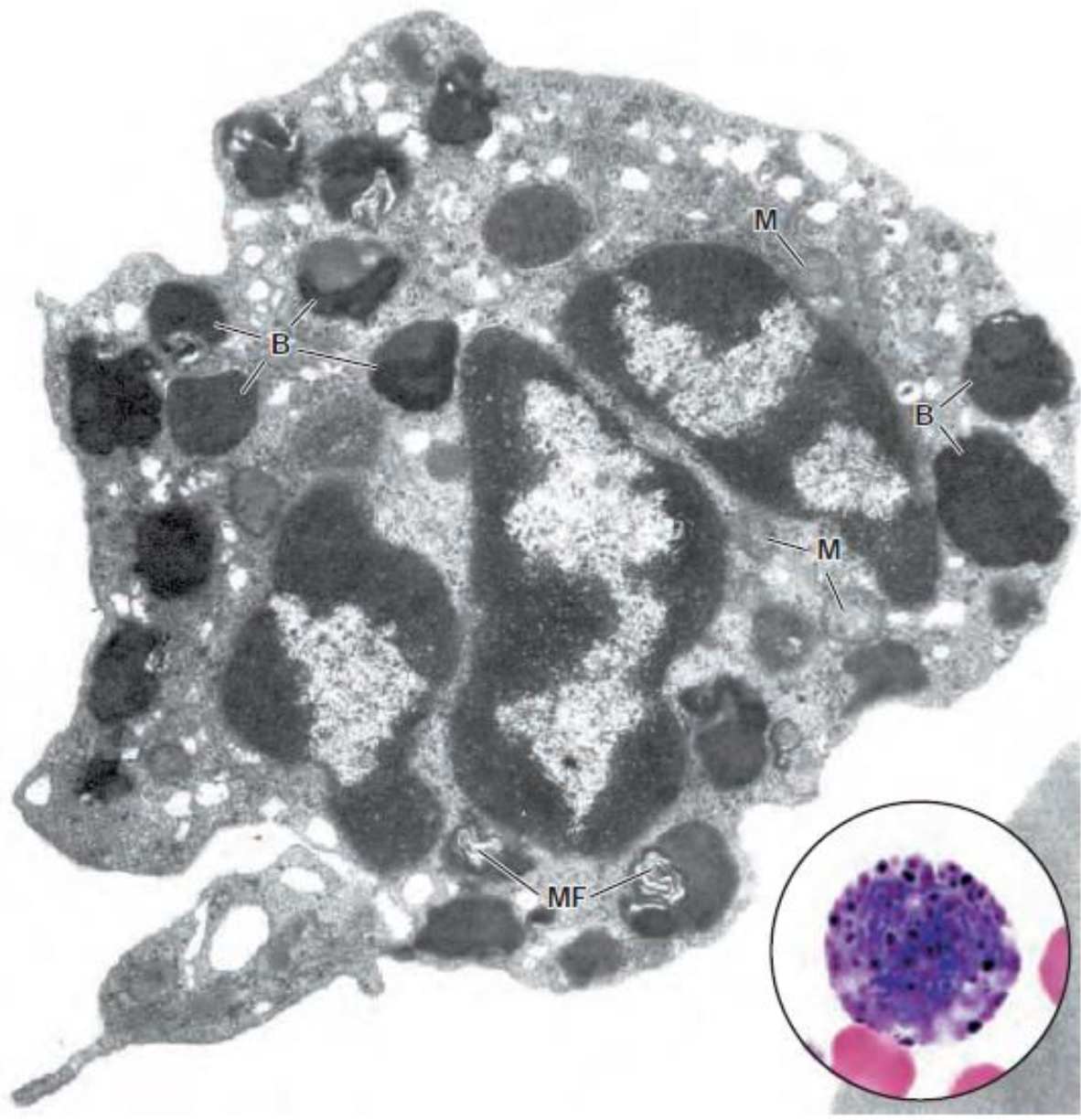
# Leukocytes

- Agranulocytes
  - Lymphocytes
  - Monocyte
- Granulocytes
  - Neutrophils
  - Eosinophils
  - Basophils

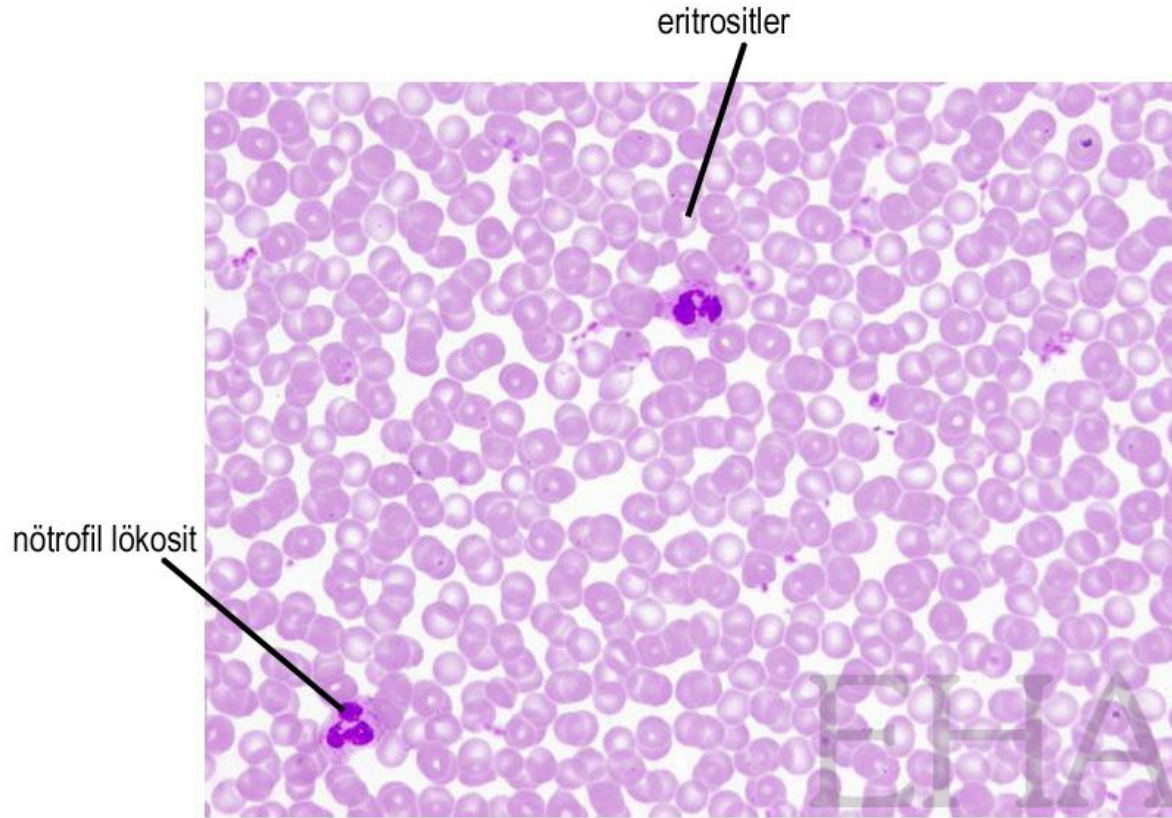


Doku : Kan Yayıması  
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# Thrombocytes –Platelets

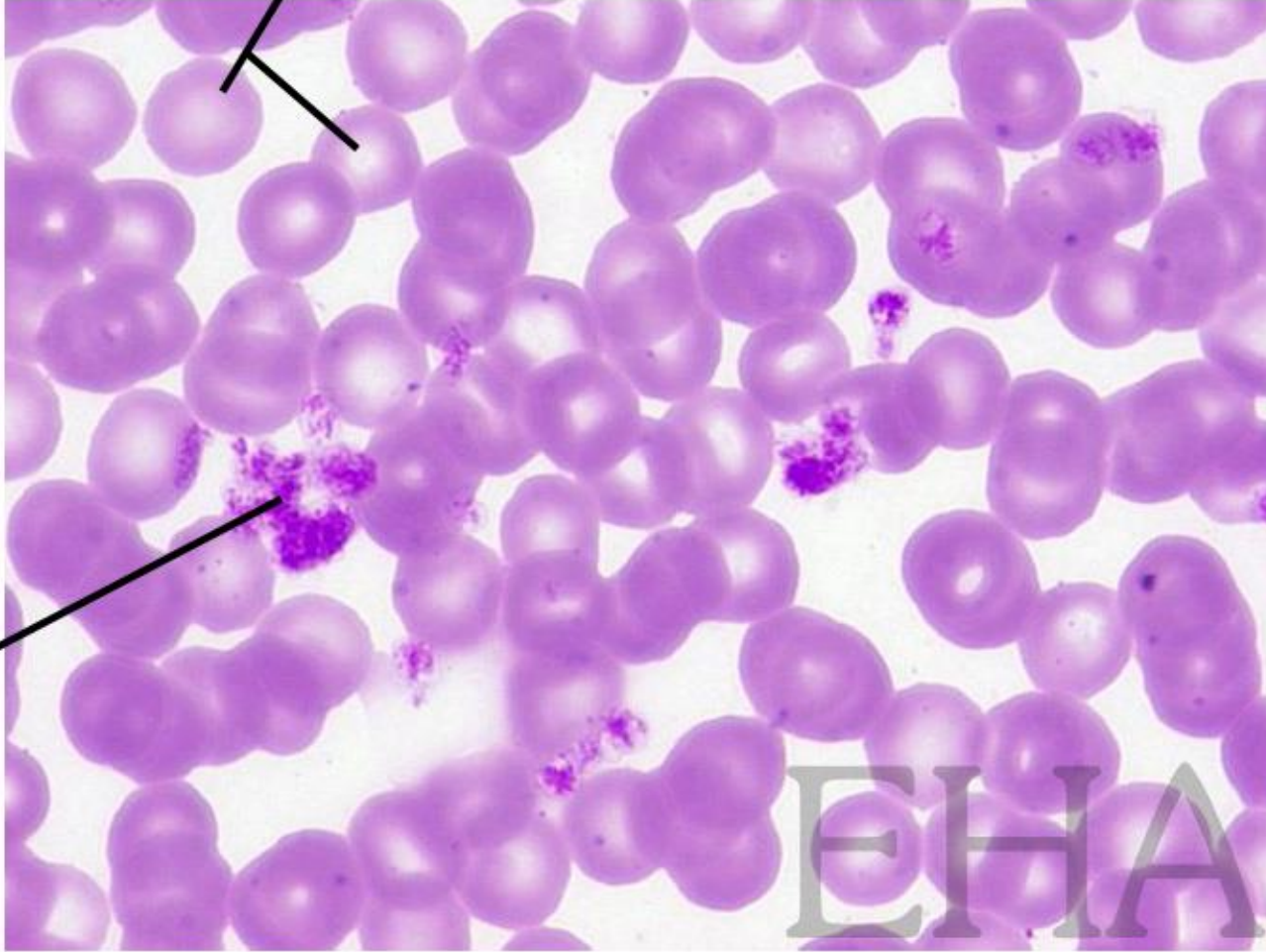


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eritrositler



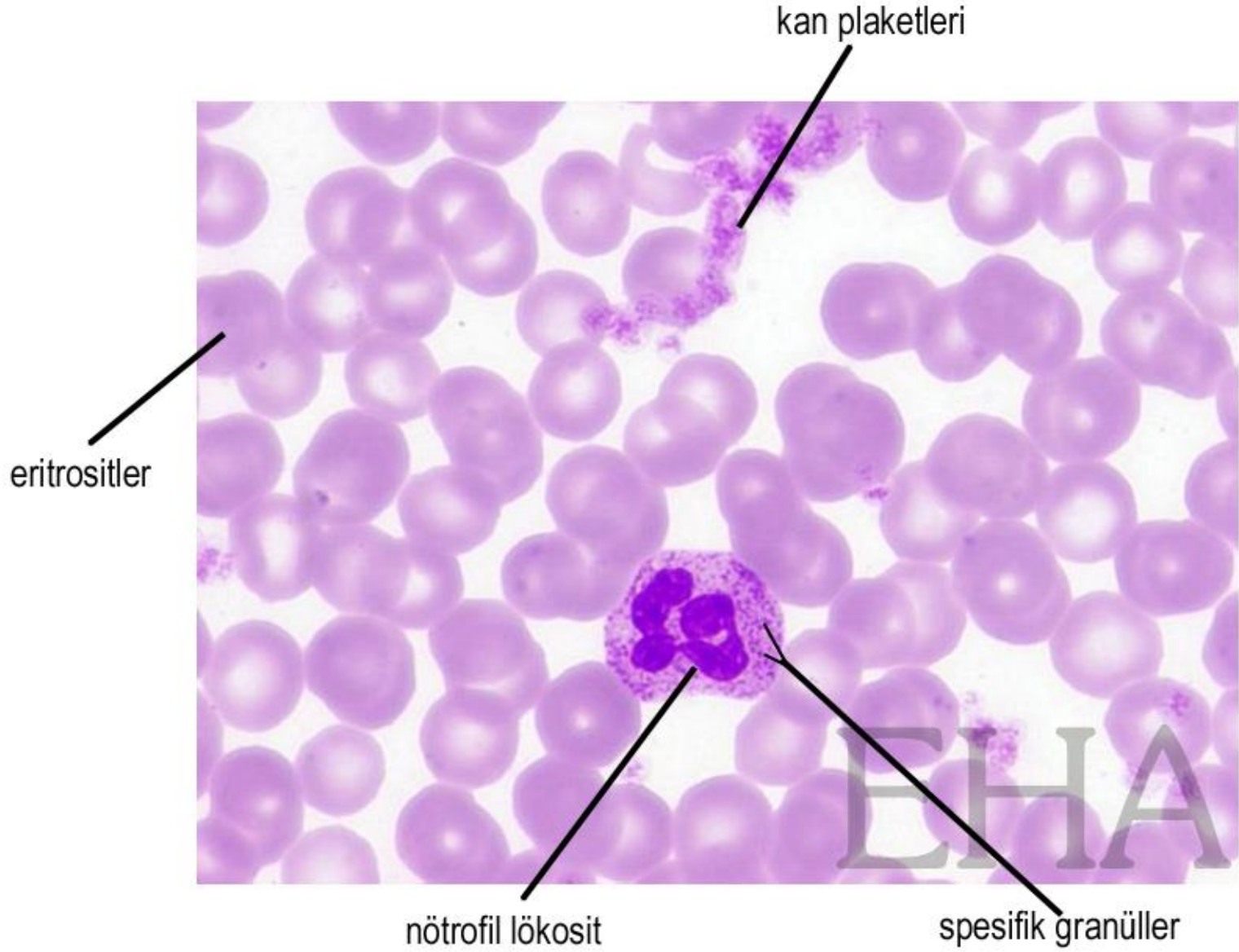
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EHA

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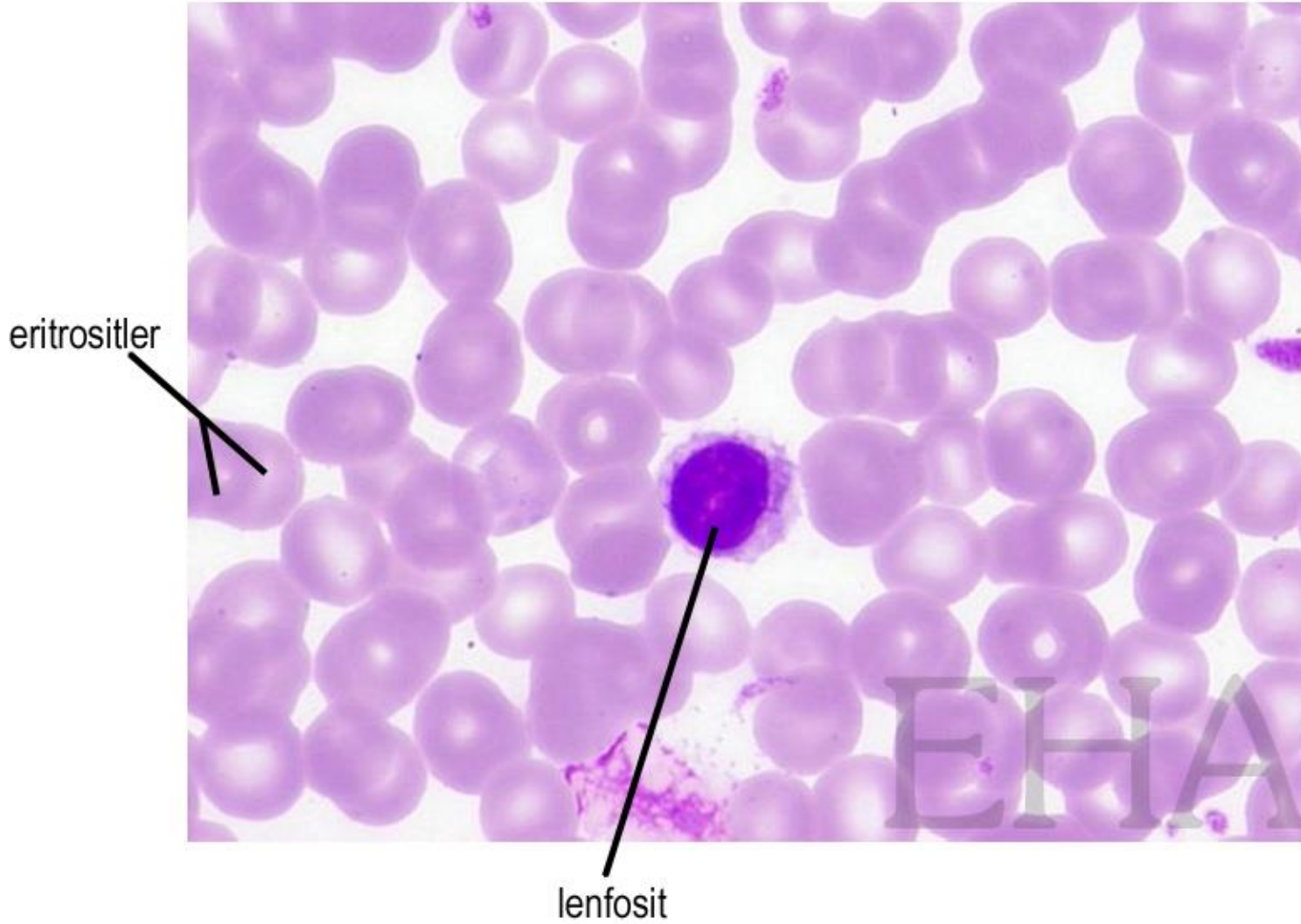
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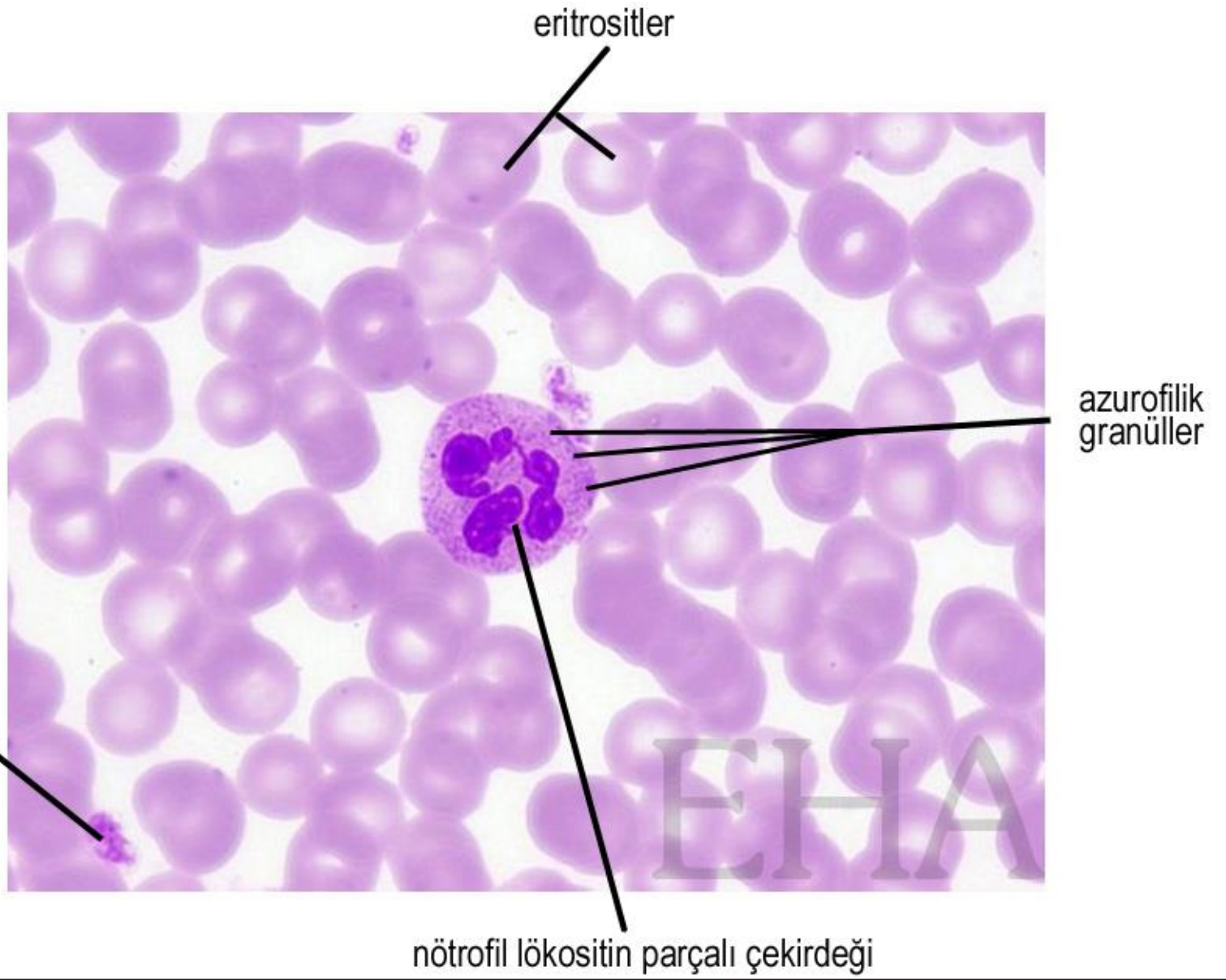
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kan plaketleri

eritrositler

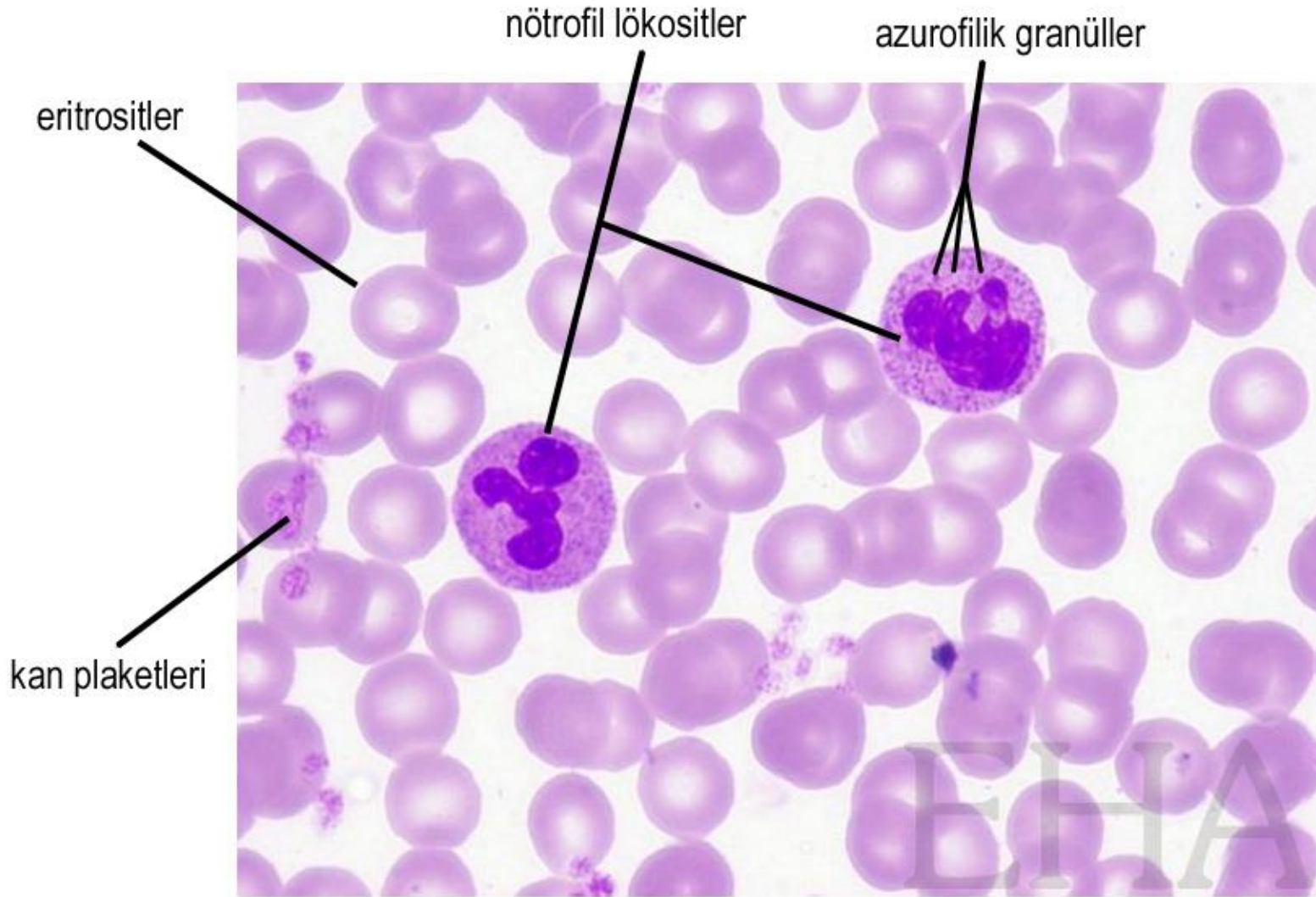
azurofilik granüller

nötrofil lökositin parçalı çekirdeği

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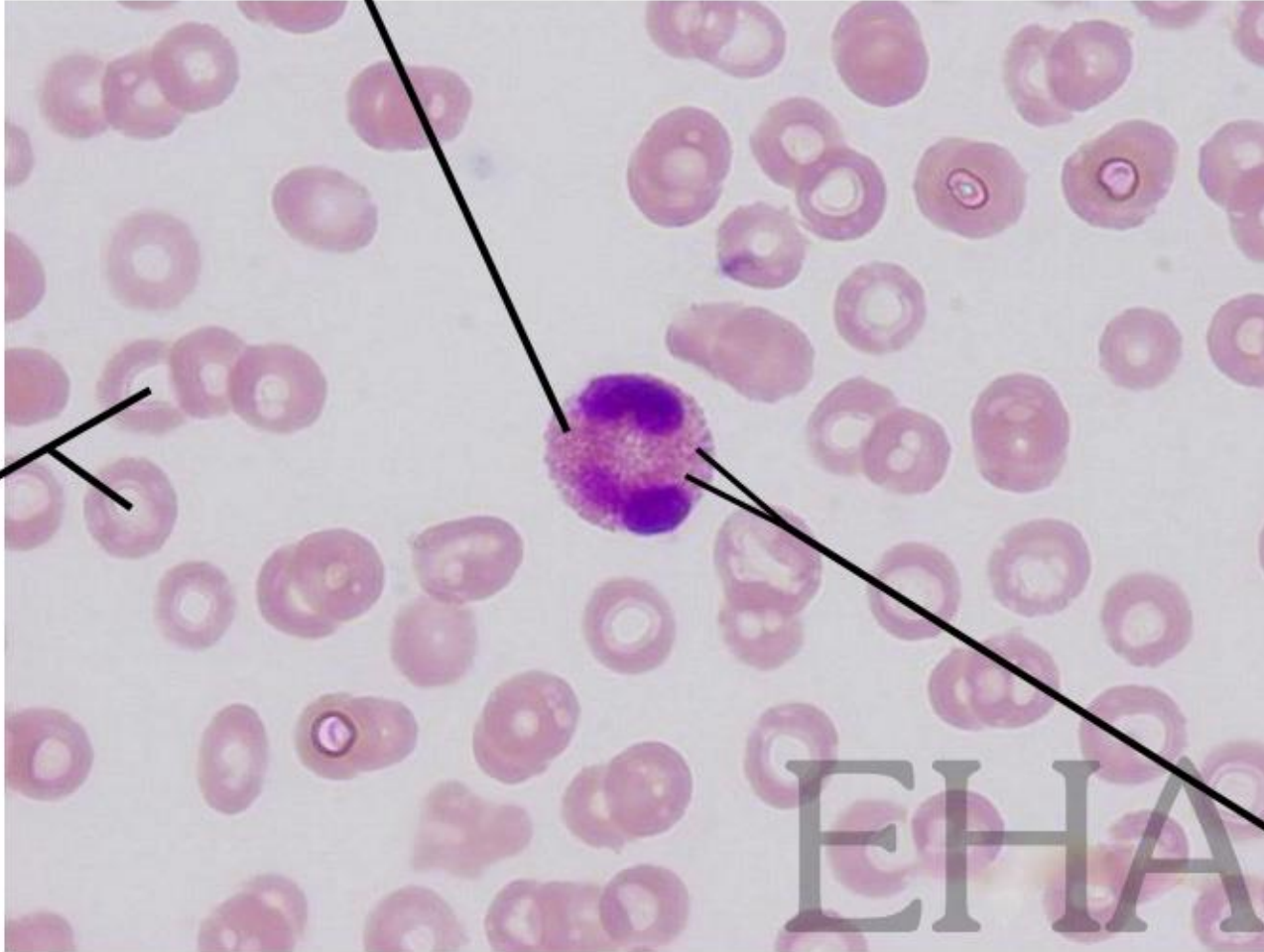
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eozinofil lökosit

eritrositler



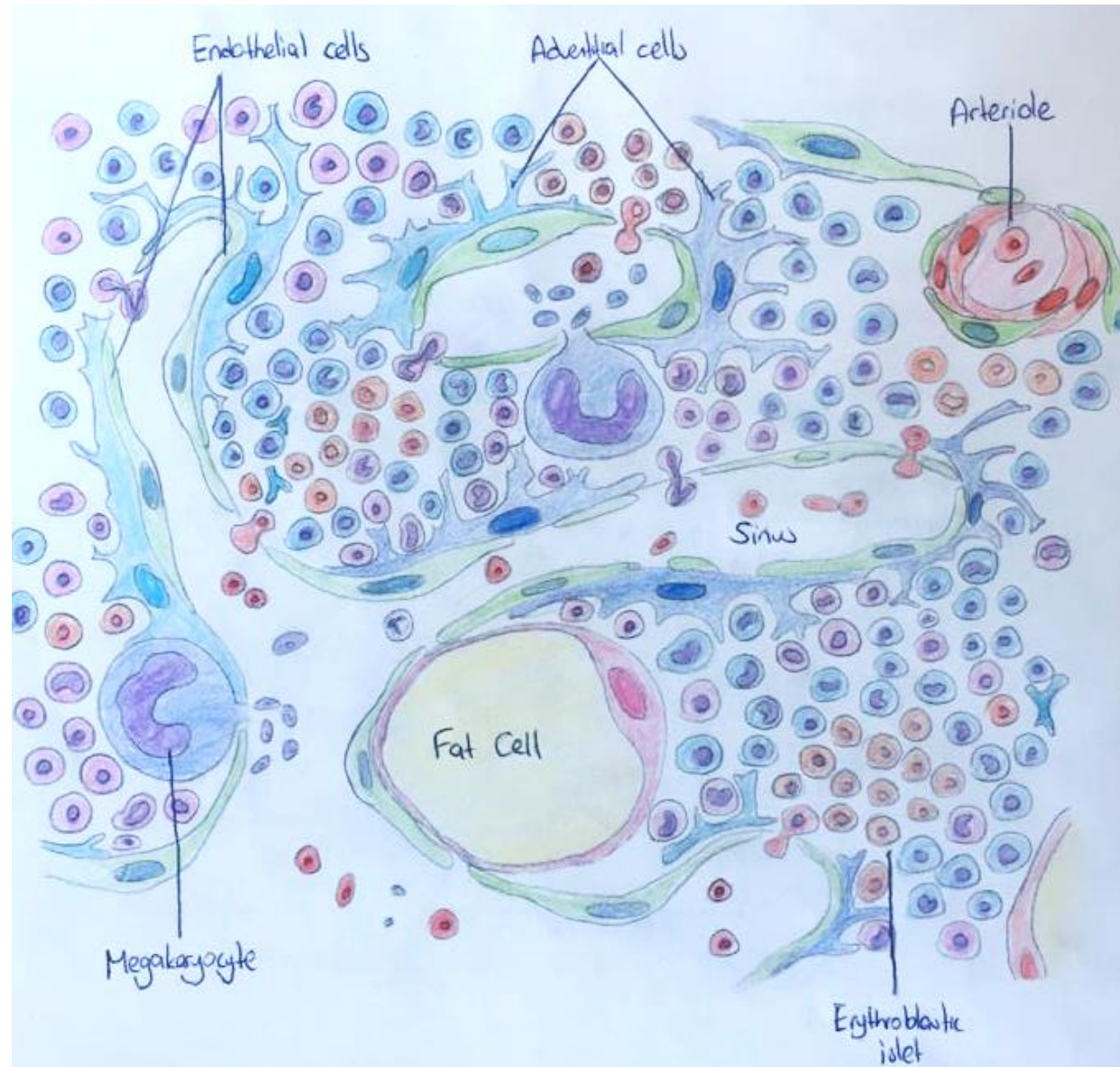
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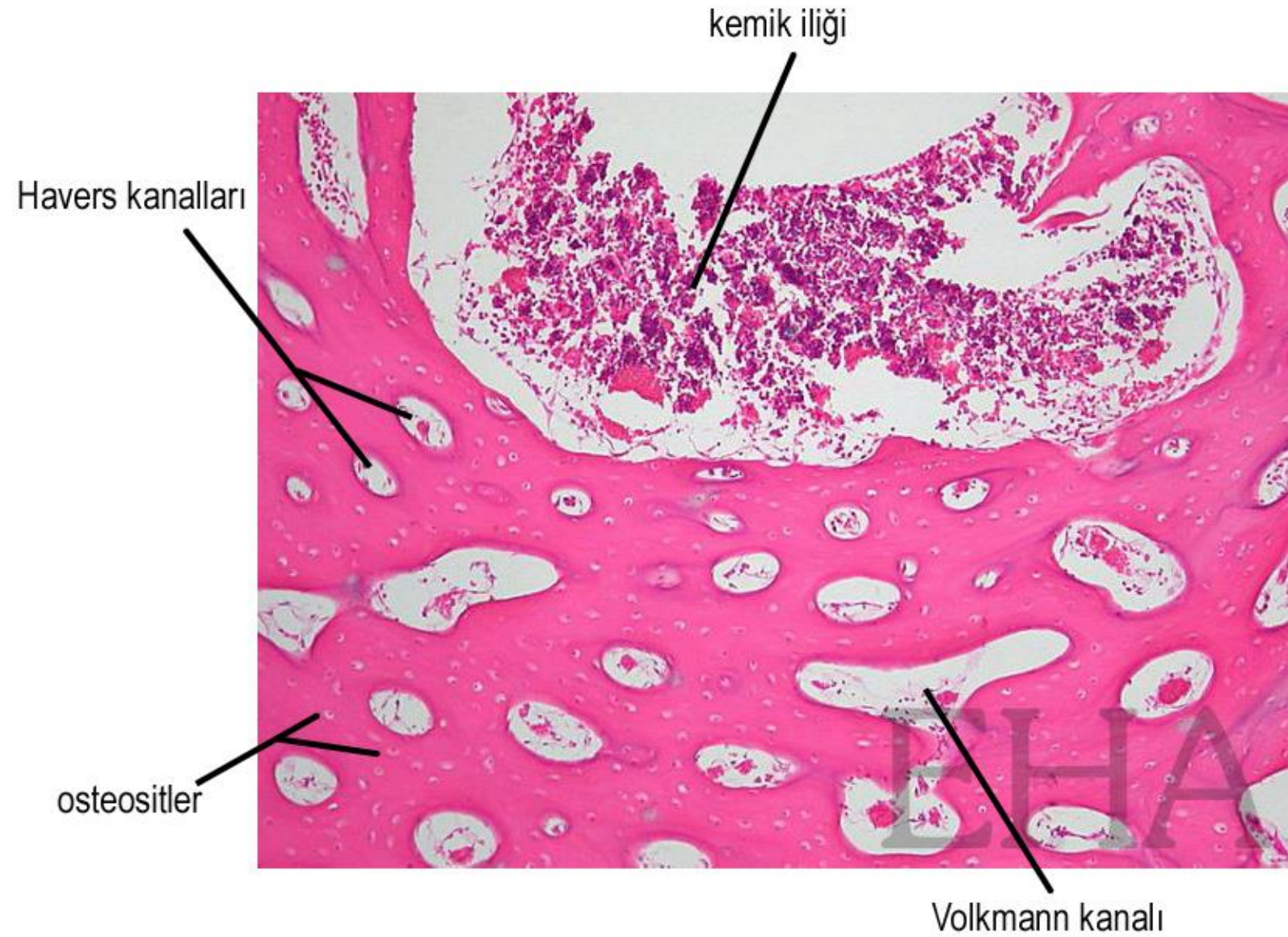
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# Bone Marrow

- Islets of blood precursors
- Sinusoids
- Endothelial cells
- Adventitial cells
- Adipocytes







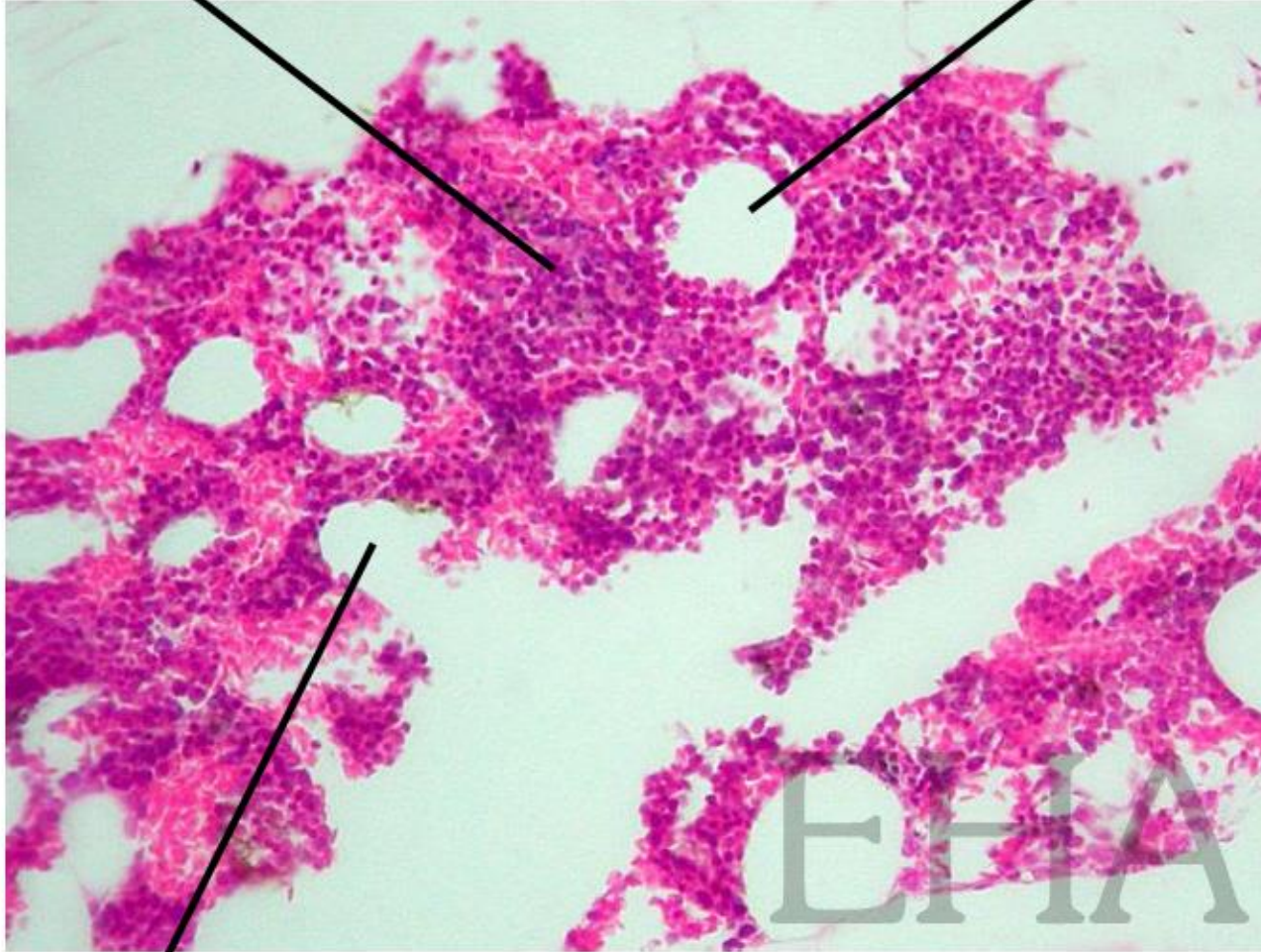
Organ : Kemik  
Tür : Memeli  
Boya : HE

ELEKTRONİK HİSTOLOJİ ATLASI v.2.0 (2006)  
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kemik iliği öncü hücreleri

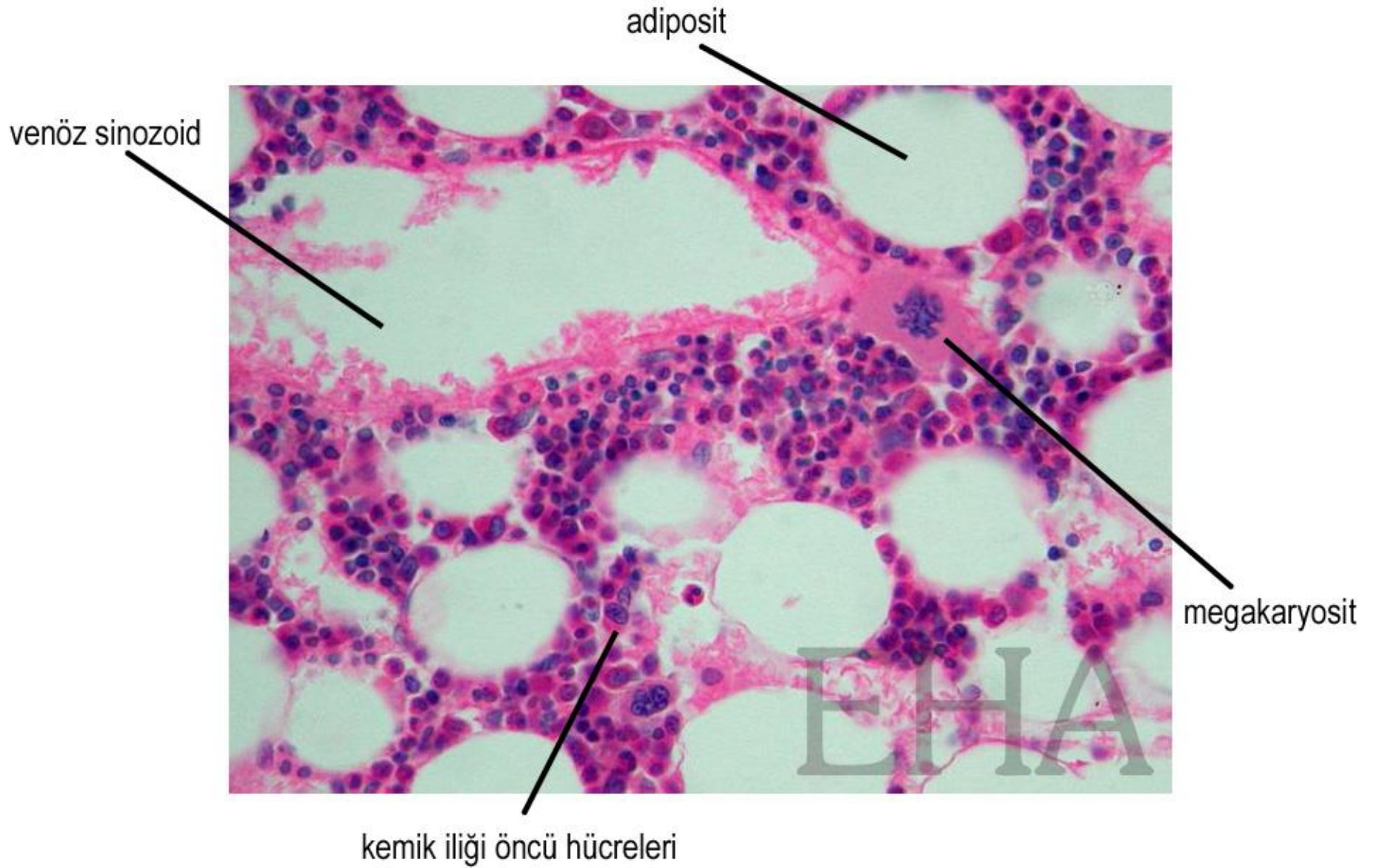
adiposit



venöz sinozoid

Doku : Kemik iliği  
Tür : İnsan  
Boya : HE

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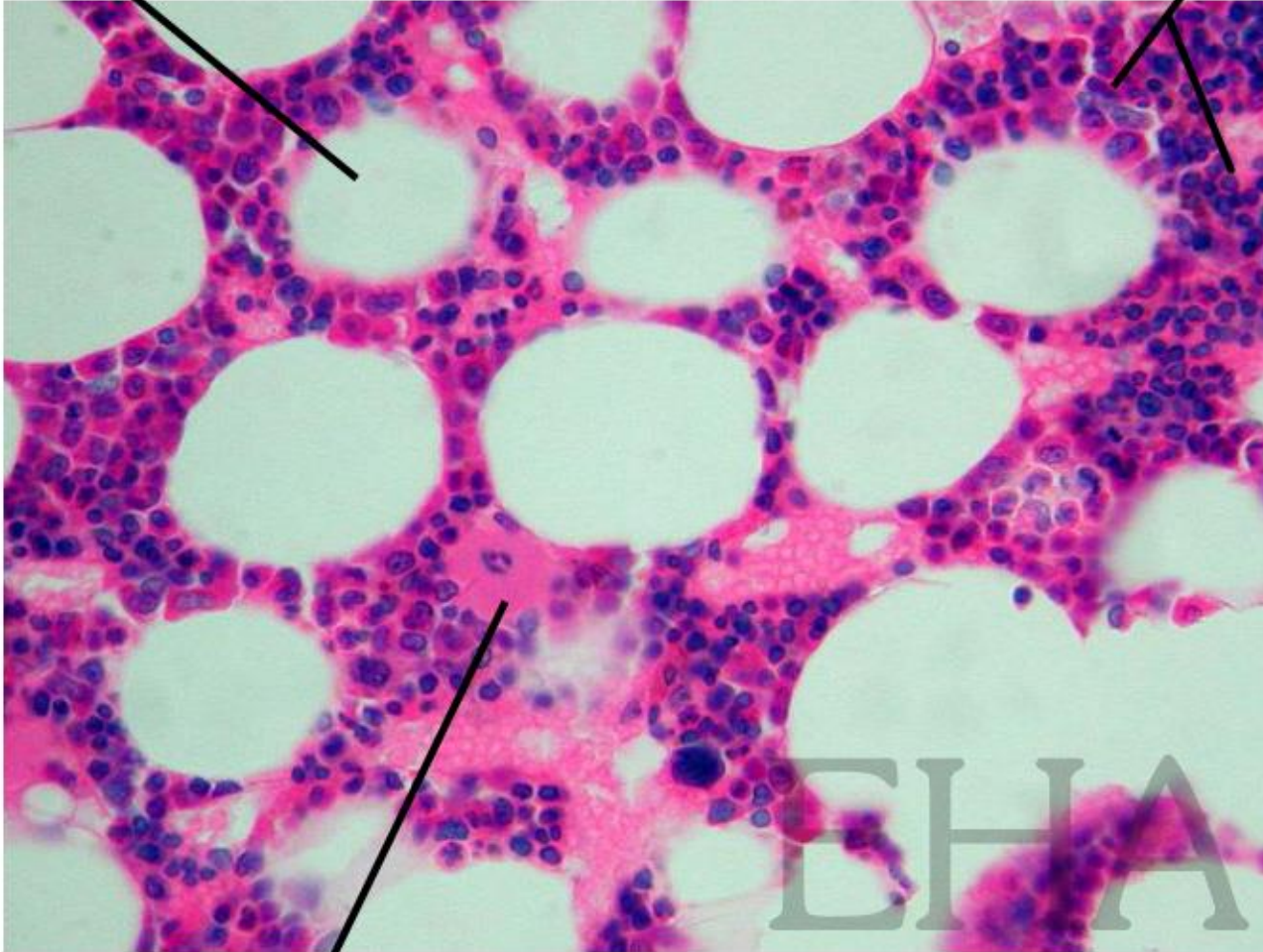


Doku : Kemik iliği  
Tür : İnsan  
Boya : HE



adiposit

kemik iliği öncü hücreleri



megakaryosit

Doku : Kemik iliği  
Tür : Memeli  
Boya : HE

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