

BLOOD CELLS

LRD 2013/01/21

Refs:

http://en.wikipedia.org/wiki/Blood_cell
http://en.wikipedia.org/wiki/White_blood_cell
http://en.wikipedia.org/wiki/B_cell
http://en.wikipedia.org/wiki/Plasma_cell

Thrombocytes (platelets)

Erythrocytes (red blood cells)

[carry O₂ and CO₂ via hemoglobin, live about 120 days]

Leukocytes (white blood cells)

[immune system components, also in lymphatic system, live 3-4 days, 1% of blood volume]

Neutrophils

[Target bacteria and fungi, live 6h to a few days]

Eosinophils

[Target larger parasites, live 8-12 days]

Basophils

[Release histamine for inflammatory responses, live a few h to a few d]

Monocytes

[Move to tissues, differentiates to macrophages]

Lymphocytes

[Complex. Live years for memory cells, weeks for all others.]

B cells (B lymphocytes)

[Release antibodies, assist in activation of T cells]

[Up to 10⁹ versions, each matched to specific antigen]

[Immature form produced in bone marrow, complex maturation process]

Plasma B cells (plasmacytes)

[differentiate from prior stage after activation by antigen, short lived]

[malignant neoplasms of plasma cells:

plasmacytoma, multiple myeloma, Waldenstrom macroglobulinemia,
plasma cell leukemia]

Memory B cells

[differentiate from prior stage after activation, long lived]

B-1 cells

B-2 cells

Marginal-zone B cells

Follicular B cells

T cells

CD4+ (T helper)

[assist in activation of B cells]

CD8+ (cytotoxic T cells)

gamma-delta T cells

regulatory (suppressor) T cells natural killer cells