
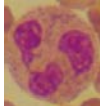
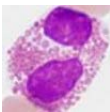

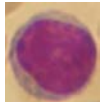
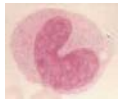


	CELL NAME	APPEARANCE	NORMAL %	NORMAL FUNCTIONS	DIFFERENTIAL COUNT
	Red Blood Cell 	Round, biconcave	3.5-5.5 million/uL 45% of total blood volume	Carries oxygen gas from lungs to tissue, carbon dioxide from tissue to lungs	Anemia
	White Blood Cells (Leukocytes)		<1% of total blood volume		
Granulocytes	Neutrophil 	Granules in cytoplasm, nucleus with 3 or 5 lobes	4,150 cells/uL 60-70% of WBC	Attacks bacteria through phagocytosis	Bacterial infection
	Eosinophil 	Granules in cytoplasm, nucleus with 2 large lobes connected by thin strand	165 cells/uL 2-4% of WBC	Attacks parasites & allergens , processes antigen/antibody complexes from lymphocytes	Parasites, allergies, diseases of spleen & central nervous system
	Basophil 	Granules in cytoplasm, typically obscuring the nucleus entirely	44 cells/uL <.5-1% of WBC	Active in injury sites, releases heparin to prevent clotting & histamines to increase inflammation	Chicken pox, sinusitis, diabetes mellitus, myxedema, polycythemia
Agranulocytes	Lymphocyte 	Clear cytoplasm, nucleus is solid & nearly fills the cell – leaving only a small clear area	2,185 cells/uL 25-33% of WBC	Identifies and “presents” pathogens, Involved in attacking viruses & abnormal tissues in the body, including cancer	Diverse infections that are mainly viral in nature, destroy cancer cells, attack foreign cells
	Monocyte 	Clear cytoplasm, nucleus is large, kidney- or horseshoe-shaped	456 cells/uL 3-8% of WBC	Initiates immune response to viruses , phagocytizes pathogens & dead cell debris	Viruses & inflammation
	Platelets	Small, fragmented	150-400 K/uL	Initiates clotting process	Hemophilia

