Subject: hematology Lab

SEC (A)

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Explain the following.

Leukopenia

**Leukopenia** (from Greek (leukos), meaning 'white', and πενία (penia), meaning 'deficiency') is a decrease in the number of leukocytes. Found in the blood, they are the white blood cells, and are the body's primary defense against infection. Thusleukopenia places individuals at increased risk of infection

Lymphocytosis

**Lymphocytosis**  or a high lymphocyte count, is an increase in white blood cells called lymphocytes. Lymphocytes help fight off diseases, so it's normal to see a temporary increase after an infection

Lymphopenia

Lymphocytopenia, also referred to as **lymphopenia**, occurs when your **lymphocyte**count in your bloodstream is lower than normal. Severe or chronic low counts can indicate a possible infection or other signficant illness and should be investigated by your doctor. Lymphocytes are a kind of white blood cell

Basophilia

**Basophilia** is **defined** as an absolute peripheral blood basophil count exceeding 200/μL. It may occur in a wide variety of infections or inflammatory and autoimmune conditions, such as tuberculosis, chickenpox, smallpox, influenza, ulcerative colitis, and rheumatoid arthritis.

Nutrophelia

**Neutrophilia**. **Neutrophilia** refers to an increase in the absolute number of **neutrophils** in the peripheral blood (ANC >7500/μL in adults). Since **neutrophils**account for the majority of the circulating leukocytes (about 60%), in most instances, white blood cell (WBC) counts of over 11,000/μL represent **neutrophilia**

Thrombocytosis

**Thrombocythemia**  and **thrombocytosis**  are conditions in which your blood has a higher than normal number of platelets (PLATE-lets). Platelets are blood cell fragments. They're made in your bone marrow along with other kinds of blood cells

Thrombocytopenia

Deficiency of platelets in the blood. This causes bleeding into the tissues, bruising, and slow blood clotting after injury.

Polycythemia

An abnormally increased concentration of haemoglobin in the blood, either through reduction of plasma volume or increase in red cell numbers. It may be a primary disease of unknown cause, or a secondary condition linked to respiratory or circulatory disorder or cancer.

Anemia

A condition in which there is a deficiency of red cells or of haemoglobin in the blood, resulting in pallor and weariness.

Leukemia

**Leukemia** is cancer of the body's blood-forming tissues, including the bone marrow and the lymphatic system. Many types of **leukemia** exist. Some forms of **leukemia** are more common in children. Other forms of **leukemia** occur mostly in adults. **Leukemia** usually involves the white blood cells.

Reticolocytosis

 Anatomical terms of microanatomy. **Reticulocytes** are immature red blood cells (RBCs). In the process of erythropoiesis (red blood cell formation),**reticulocytes** develop and mature in the bone marrow and then circulate for about a day in the blood stream before developing into mature red blood cells.

**Location:**[Bone marrow](https://en.wikipedia.org/wiki/Bone_marrow) (most), [blood](https://en.wikipedia.org/wiki/Blood) (some)

**Gives rise to:**[Red blood cells](https://en.wikipedia.org/wiki/Red_blood_cell)