

Hematocrit? Measures the amount of red blood cells in blood. Mine has been consistently high

Hemoglobin? an iron-rich protein found in red blood cells that is responsible for transporting oxygen throughout the body. Sometimes high, sometimes normal.

RBC: Red blood cells

CBC w/Differential: This panel of tests looks for many illnesses, including anemia, infections, and leukemia, in your blood. It can help see how your overall health is. Included in this test:

MCV (included in CBC w/Diff test) measures the average size of your red blood cells. red blood cells carry oxygen from your lungs to every cell in your body. High MCV means that the RBC are too large and indicates macrocytic anemia. (test results at top level of normal).

MPV: measurement of the average size of platelets in the blood. Platelets are small blood cells that help stop bleeding by forming clots. Mine are low.

Complete Metabolic Panel:

Creatinine: A waste product produced by muscle breakdown. It is filtered out of the blood by the kidneys and excreted in urine. A creatinine blood test measures the amount of creatinine in the blood. Used to assess kidney function or diagnose kidney disease. Mine is normal.

BUN (blood urea nitrogen): a blood test that measures the amount of urea nitrogen in the blood. It may be ordered for individuals with conditions that can affect kidney function, such as diabetes, high blood pressure, and heart failure--Mine is normal.

Metanephrines Fractionated Plasma: tests for a tumor on adrenal glands--normal

Aldosterone/Renin Panel: Measures hormone level secreted by adrenal glands, regulates blood pressure: Normal

Differential Panel: Measures neutrophils, lymphocytes, monocytes, eosinophils,

Neutrophils: a type of white blood cell (leukocyte) that plays a crucial role in the body's immune system

Lymphocytes: a type of white blood cell that plays a crucial role in the immune system. They are produced in the bone marrow and circulate throughout the body in the bloodstream and lymphatic system

Monocytes: A type of white blood cell (leukocyte) that plays a crucial role in the immune system. Monocytes engulf and destroy pathogens (bacteria, viruses, fungi) and cellular debris.

Eosinophils: A type of white blood cell that plays a role in the immune system, characterized by their large, pink-staining granules and are found in various tissues throughout the body,

including the bone marrow, blood, lungs, and gastrointestinal tract, are primarily responsible for defending the body against parasitic infections. They release enzymes and proteins that kill parasites and promote tissue repair.

JAK2: mutation test, is a diagnostic test that looks for mutations in the JAK2 gene.

The *JAK2* gene provides instructions for making a protein that promotes the growth and division (proliferation) of cells. This protein is part of a signaling pathway called the JAK/STAT pathway, which transmits chemical signals from outside the cell to the cell's nucleus. The JAK2 protein is especially important for controlling the production of blood cells from hematopoietic stem cells. These stem cells are located within the bone marrow and have the potential to develop into red blood cells, white blood cells, and platelets.

High hematocrit, normal red blood cell (RBC) count, normal hemoglobin, and low mean corpuscular volume (MCV) levels could indicate microcytosis, which is when red blood cells are smaller than normal

*Microcytosis* describes red blood cells that are smaller than normal. You have *microcytosis* if your MCV value on a blood test is less than 80 femtoliters