

Lab Test Analysis Report

Patient's Name: [Unknown]

Test Date: [Unknown]

Test Type: Comprehensive Lab Report

To interpret these lab test results, let's break down each section and analyze the findings:

1. **Hematology:**

- **Hematocrit**: 40.9% (Normal range: 39.5-50.5)
- **Hemoglobin**: 14.0 g/dL (Normal range: 13.5-17.2)
- **Red Blood Cells (RBCs)**: 4.82 T/L (Normal range: 4.30-5.75)
- **Mean Corpuscular Volume (MCV)**: 84.9 fL (Normal range: 80.0-99.0)
- **Mean Corpuscular Hemoglobin Concentration (MCHC)**: 34.2 g/dL (Normal range: 31.5-36.5)
- **Mean Corpuscular Hemoglobin (MCH)**: 29.0 pg (Normal range: 27.0-33.5)
- **Red Cell Distribution Width (RDW)**: 12.8% (Normal range: 11.0-14.0)
- **White Blood Cells (WBCs)**: 4.96 G/L (Normal range: 3.90-10.20)
- **Neutrophils**: 61.9% (3.07 G/L) (Normal range: 1.50-7.70 G/L)
- **Eosinophils**: 1.8% (0.09 G/L) (Normal range: 0.02-0.50 G/L)
- **Basophils**: 0.2% (0.01 G/L) (Normal range: 0.00-0.20 G/L)
- **Lymphocytes**: 26.4% (1.31 G/L) (Normal range: 1.10-4.50 G/L)
- **Monocytes**: 9.7% (0.48 G/L) (Normal range: 0.10-0.90 G/L)
- **Platelets**: 164 G/L (Normal range: 150-450 G/L)
- **Mean Platelet Volume (MPV)**: 10.1 fL (Normal range: 8.0-12.0 fL)

Interpretation: The hematology results are generally within normal ranges. The results indicate a normal red blood cell count and function, and normal white blood cell differential except for a slight decrease in the lymphocyte count from the previous test. Platelet count and volume are also within the normal range.

2. **Biochemical Profile:**

- *Uric Acid*: 0.10 mmol/L or 17 mg/L (Normal range: 0.22-0.45 mmol/L or 37-76 mg/L)
- *Potassium*: 3.8 mmol/L (Normal range: 3.5-4.5 mmol/L)
- *C-Reactive Protein (CRP)*: 2.1 mg/L (Normal range: <5.0)

Interpretation: The uric acid level is significantly below the reference range, which could indicate an under-consumption of protein or possible medication influence. Potassium level is normal. CRP, an inflammation marker, is also within a non-concerning level.

3. **Proteins, Markers, and Vitamins:**

- *Prostate-Specific Antigen (PSA)*: 0.78 ng/mL (Normal range: <4.00 ng/mL)
- *Vitamin B12*: 116 pmol/L (Normal range: 138-652 pmol/L)

Interpretation: PSA level is well within the normal range, indicating no immediate concern regarding prostate issues. The Vitamin B12 level is below the normal range, suggesting possible deficiency which might require dietary adjustment or supplementation.

Summary:

The patient's lab results are predominantly normal, with the most noteworthy findings being the low uric acid and Vitamin B12 levels. Follow-up might be needed to address the potential vitamin deficiency. Regular monitoring and consultation with a healthcare provider are suggested to understand and manage any health conditions or laboratory variances.