

# Lab Test Analysis Report

**Patient's Name:** [Unknown]

**Test Date:** [Unknown]

**Test Type:** Comprehensive Lab Report

The lab test results for this patient provide several key insights:

1. **\*\*Packed Cell Volume (PCV)\*\*:** Elevated at 57.5% (reference range 40-50%). This could indicate dehydration or polycythemia (an increase in the number of red blood cells).
2. **\*\*Mean Corpuscular Volume (MCV)\*\*:** Normal at 87.75 fL (reference range 83-101 fL). This suggests that the size of the red blood cells is within the normal range.
3. **\*\*Mean Corpuscular Hemoglobin (MCH)\*\*:** Normal at 27.2 pg (reference range 27-32 pg).
4. **\*\*Mean Corpuscular Hemoglobin Concentration (MCHC)\*\*:** Normal at 32.8 g/dL (reference range 32.5-34.5 g/dL).
5. **\*\*Red Cell Distribution Width (RDW)\*\*:** Normal at 13.6% (reference range 11.6-14.0%). A normal RDW indicates uniformity in red blood cell size.
6. **\*\*Hemoglobin (Hb)\*\*:** Low at 12.5 g/dL (reference range 13.0-17.0 g/dL). This low level suggests anemia, which is further mentioned in the interpretation that suggests confirming for anemia.
7. **\*\*Total Red Blood Cell (RBC) Count\*\*:** Normal at 5.2 million/cumm (reference range 4.5-5.5 million/cumm).
8. **\*\*Total White Blood Cell (WBC) Count\*\*:** Normal at 9000 cumm (reference range 4000-11000 cumm).

9. **Differential WBC Count**:

- **Neutrophils**: 60% (normal range).
- **Lymphocytes**: 31% (normal range).
- **Eosinophils**: 1% (normal range).
- **Monocytes**: 7% (normal range).
- **Basophils**: 1% (normal range).

10. **Platelet Count**: Borderline low at 150,000 cumm (reference range 150,000 - 410,000 cumm).

This might need monitoring as borderline low levels can hint at either underproduction or increased destruction.

**Interpretation and Recommendations**:

- The patient has anemia, as indicated by the low hemoglobin level. It is important to assess for causes such as nutritional deficiencies (iron, B12, folate), blood loss, or hemolysis.
- The elevated PCV, despite normocytic and normochromic indices, might require exploration for hydration status or other causes of polycythemia.
- Further evaluation, as suggested in the report, is essential to confirm the type and cause of anemia and determine appropriate management.
- Monitoring platelet count might be necessary given the borderline values.

The patient should consult with their healthcare provider for a detailed analysis and appropriate treatment based on these findings.