

## Lab Result Interpretation with CoT

### Interpretation Framework

- **Normal vs Abnormal:** Reference range comparison
- **Pattern Recognition:** Constellation of abnormalities
- **Clinical Context:** Integrate with symptoms and history
- **Differential for Findings:** What causes this pattern?

### Example: Anemia Workup

**Results:** Hgb 8.5, MCV 68, Ferritin 8, TIBC ↑

**Step 1:** Anemia confirmed (low Hgb)

**Step 2:** Microcytic (low MCV) → think Fe, thalassemia, chronic disease

**Step 3:** Low ferritin + high TIBC → iron deficiency

**Step 4:** Cause? → GI loss, dietary, malabsorption

**Diagnosis:** Iron deficiency anemia → investigate source

**Integration:** Labs + clinical picture = complete assessment