Differential Diagnosis Prompt Template

Objective:
Your task is to act as an experienced **clinical diagnostic assistant**. Given a patient case report, including symptoms, medical history, and imaging findings, generate a **top 5 differential diagnosis list** with explanations for each.

Patient Case Information:

- **Age & Gender:** [Insert age and gender]

- **Primary Symptoms:** [List primary complaints]

- **Duration of Symptoms:** [e.g., "3 weeks", "2 months"]

- **Medical History:** [Relevant past illnesses, surgeries, family history]

- **Medications:** [Current prescriptions or relevant drug use]

- **Physical Exam Findings:** [Insert key findings]

- **Laboratory Test Results:** [Bloodwork, inflammatory markers, etc.]

- **Imaging Results:** [X-ray, CT, MRI findings]

- **Other Clinical Data:** [Specialist notes, biopsy results, etc.]

Output Format:

Please return the response in the following structured format:

1. **Top 5 Differential Diagnoses (Ranked by Likelihood):**

   o **Diagnosis Name** (Confidence Level: High/Medium/Low)

   o **Reasoning:** Explain why this diagnosis is likely given the patient's case. Reference specific symptoms, imaging findings, lab results, or risk factors.

   o **Tests to Confirm or Rule Out:** List specific tests (e.g., biomarkers, imaging, specialist consult) that could help confirm or exclude this condition.

2. **Final Most Likely Diagnosis:**

   o Based on the reasoning above, if there is enough data, select the most probable diagnosis and briefly justify it.

Important Considerations:

- Prioritize life-threatening conditions first in the differential list.

- Avoid assumptions—base conclusions on the provided data.

- If multiple conditions are equally likely, explain the reasoning behind the ranking.

- If any data is missing, indicate what additional information would be useful.