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**Case 36 (November 19 2009):** [N Engl J Med. 361\(21\):2080-2087](#)

**Demographic:** Male, 23 yrs, America North, General speciality

**Clinical features extracted from the case and entered into the query box:**

fevers  
myalgias  
fatigue  
night sweats  
weight loss  
mediastinal lymphadenopathy  
elevated lactate dehydrogenase  
elevated alkaline phosphatase  
testicular mass

**Synonyms used by Isabel PRO for the above query:**

elevated lactate dehydrogenase  
elevated alkaline phosphatase  
fevers  
weight loss  
night sweats  
fatigue  
testicular mass  
mediastinal lymphadenopathy  
myalgias

**STOP !**

**Before you read further you might want to construct your own:**

- Complete differential diagnosis
- Final diagnosis

**In the following section you will find:**

- The differential diagnosis constructed by the MGH panel
- The final diagnosis of the case
- Which of the MGH panel differential diagnoses did Isabel PRO contain
- Did Isabel PRO suggest the Final diagnosis

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**Differential Diagnoses considered by the MGH panel:**

- Large-B-cell lymphoma
- T-cell lymphoblastic lymphoma
- Hodgkin's lymphoma
- Burkitt's lymphoma
- Osteosarcoma

**Final Diagnosis of the case according to NEJM:**

Ewing's sarcoma of the bone, with metastasis to the lung and mediastinal lymph nodes

**Differential Diagnoses of the case as given by Isabel PRO:**

- Large-B-cell lymphoma – under Non-hodgkin's lymphoma in Neoplastic diseases
- T-cell lymphoblastic lymphoma - under Non-hodgkin's lymphoma in Neoplastic diseases
- Hodgkin's lymphoma – in Neoplastic diseases
- Burkitt's lymphoma - under Non-hodgkin's lymphoma in Neoplastic diseases
- Osteosarcoma – under malignant bone tumors in Neoplastic diseases

**Was the final diagnosis given by Isabel PRO:**

Yes, Ewings sarcoma under malignant bone tumors in Neoplastic diseases.

**Isabel PRO Final Diagnosis:**

The screenshot displays the Isabel PRO interface. On the left, under 'ENTER CLINICAL FEATURES', there are dropdown menus for age (young adult (16 - 30 years)), gender (male), pregnancy (- not specified -), region (America North), and speciality (General). Below these are text input fields for query terms: fevers, myalgias, fatigue, night sweats, weight loss, mediastinal lymphadenopathy, elevated lactate dehydrogenase, elevated alkaline phosphatase, and testicular mass. A 'Get Checklist' button is present. On the right, under 'DEGREE OF MATCH', a list of 8 neoplastic diseases is shown, with 'Ewing's Sarcoma' highlighted. A yellow box explains the match: 'We matched the terms: elevated lactate dehydrogenase | fever | fevers | weight loss | fatigue | mediastinal lymphadenopathy'. Below this, a list of 12 body systems is shown, including Infectious Diseases, Rheumatic Diseases, Respiratory Disorders, Cardiac Disorders, Gastrointestinal Disorders, Nervous System Disorders, Endocrine Disorders, Liver Disorders, Nephrology Disorders, Hematology Disorders, Urologic Disorders, and Neoplastic Diseases.

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