Preliminary Report

Name:	Abhinav Aggarwal
Age:	22 years
Gender:	male
Height:	173 cm
Weight:	79 kg



Diseases and Probabilities

Disease	Probability
Infiltration	33.00%
Effusion	15.80%
Atelectasis	9.30%

Analysis Insights

Here's a detailed breakdown and explanation of the probabilities and certainty levels for the diseases Infiltration, Effusion, and Atelectasis based on the provided questionanswer pairs:

1. Infiltration:

Probability: 33%

Symptoms Reported:

Dry coughs recently

Coughing up blood, even in small amounts

Changes in physical activity or environment that might have worsened breathing or cough

No difficulty breathing due to physical activity noted

No recent fever

Analysis: The presence of a dry cough and coughing up blood, alongside environmental or activityrelated changes affecting respiratory health, points strongly towards Infiltration. However, the lack of fever and nonspecificity about difficulty breathing during physical activity renders a complete diagnosis challenging.

Certainty Level: Medium. The symptoms align with common presentations of Infiltration but are not conclusively diagnostic without further testing or more definitive symptoms.

2. Effusion:

Probability: 15.8%

Symptoms Reported:

Difficulty breathing, changing with activity or position

Mucusproducing cough

No sharp chest pain with deep breaths or coughing

No fever

No unusual swelling in the neck or hiccups

Analysis: Difficulty in breathing that varies with position is characteristic of Effusion, as fluid in the pleural space can shift and cause varying degrees of lung compression. Mucus production can also occur. However, the absence of other supportive symptoms like fever, sharp chest pain, or supraclavicular swelling, lessens the overall specificity of these symptoms to Effusion.

Certainty Level: Medium. The symptoms suggest Effusion, particularly the breathing difficulties related to position, but lack a fuller symptomatology that would warrant a higher level of certainty.

3. Atelectasis:

Probability: 9.3%

Symptoms Reported:

Breathing difficulty described vaguely as 'yes', which could imply constant or with activities

No coughing more than usual or mucus production

Rapid, shallow breathing, and difficulty catching breath

No chest pain or bluish tint to the skin or lips

Analysis: Rapid, shallow breathing, and generalized breathing difficulty could be indicative of Atelectasis, where partial or complete lung collapse impacts respiratory function. The lack of specificity in the answer and absence of other direct symptoms such as mucus production, chest pain, or cyanosis, makes it hard to diagnose definitively based on the given information.

Certainty Level: Low. While some symptoms are present that could suggest Atelectasis, the evidence is not definitive enough to characterize the probability with higher certainty without further specific diagnostic information or tests.

This analysis carefully considers the patients' answers to relevant questions, aligning symptoms with the probabilities and corresponding certainty levels for each disease. The certainty levels are based on the information provided and general medical guidelines about symptom presentation and disease diagnosis, without additional tests or clinical assessments that could further refine these diagnoses.