

Asthma Diagnostic Report

Patient Information

Patient Name: Rajesh Kumar

Patient ID: 20250731-AST-049

Age: 27

Sex: Male

Date of Test: 31 July 2025

Clinician: Dr. Anjali Mehra

Hospital/Clinic: Apollo HealthCare, Mumbai

1. Patient Symptoms Summary

Shortness of breath | Present: Yes | Severity: 7

Wheezing | Present: Yes | Severity: 6

Chest tightness | Present: Yes | Severity: 5

Chronic cough | Present: Yes | Severity: 8

Nighttime awakenings | Present: Yes | Severity: 4

2. Spirometry Test Results

FEV1 | 2.05 L | 3.20 L | 64% | Below Normal

FVC | 3.10 L | 4.00 L | 77% | Mild Restriction

FEV1/FVC | 66% | >75% | - | Obstructive Pattern

3. Peak Flow Meter Readings

Morning: 250 L/min

Evening: 190 L/min

Variation: ~24% (Suggestive of asthma)

4. AI-Powered Model Prediction

Input Provided:

Asthma Diagnostic Report

"Rajesh Kumar 27 Male reports breathlessness, cough at night, and wheezing. He has a family history of asthma. No prior hospitalization."

Model Output (BioBERT + History Integration):

Prediction: Asthma Likely

Confidence Score: 0.91

Explanation: Based on symptoms + FEV1/FVC ratio <70% and >20% diurnal variation in peak flow, indicative of asthma.

5. Recommendations

Treatment Plan:

- Inhaled corticosteroids (Fluticasone 100 mcg, 2 puffs/day)
- Short-acting beta-agonist (Salbutamol as needed)
- Avoid known triggers: dust, pollen, cold air

Follow-up: 2 weeks

Allergy Testing: Recommended

Lifestyle Advice: Regular breathing exercises, keep home dust-free

Physician's Note

"Rajesh shows classic signs of mild-to-moderate persistent asthma. Responded well to bronchodilator during spirometry, which confirms reversibility. Immediate initiation of controller therapy advised."

Signature

Dr. Anjali Mehra

MBBS, MD (Pulmonology)