

AI-Assisted Lung CT Analysis

Clinician Decision Support Report

386a3544-ef44-4d10-bc2c-764455f06356

Scan Date: 2026-02-12

Patient: N/A (N/A, N/A yrs)

⚠ DATA QUALITY WARNINGS

- [Schema:nodules → 0 → type] 'benign' is not one of ['solid', 'subsolid', 'ground-glass', 'ground_glass', 'ggo', 'unknown']
- [Nodule 1] Unknown type 'benign' - expected solid/subsolid/ground-glass

LUNG CONDITION SUMMARY

| | | | |
|-----------------|-------------|----------------------|----------|
| Overall Status: | AI-Analyzed | Emphysema Score: | 0.0000 |
| Fibrosis Score: | 0.0000 | Consolidation Score: | 0.0000 |
| Airway Wall: | Normal | Processing Time: | 6.38 sec |

DETECTED PULMONARY NODULES (1)

| ID | SIZE (MM) | VOLUME (MM ³) | TYPE | LOCATION | MALIGNANCY | REVIEW | XAI |
|----|-----------|---------------------------|--------|----------|------------|--------|--------|
| 1 | 5.0 | 84.0 | benign | RLL | 3.3% | No | No XAI |

CLINICAL IMPRESSION

AI detected 1 nodule(s), all classified as low risk. Routine follow-up suggested.

EXPLAINABILITY SUMMARY

No AI explainability visualizations were generated for this scan.

Visualizations available for 0/1 nodules.

⚠ AI-Assisted Screening Notice: This report was generated by automated AI analysis and is intended for decision support only. All findings must be validated by a qualified radiologist or physician. AI predictions are probabilistic and should not be used as the sole basis for clinical decisions.

AI-Assisted Clinical Discussion

Clinical Discussion The low-dose CT demonstrates a solitary solid nodule measuring 5 mm (volume $\approx 84 \text{ mm}^3$) in the right lower lobe. The AI model classifies the lesion as "benign" with a malignancy probability of 3.3% (confidence 96.7%) and no review flag. According to Lung-RADS, a solid nodule <6 mm without suspicious morphology is categorized as **Lung-RADS 2 (benign-appearing nodule)**. The size and smooth morphology are most consistent with a benign etiology such as a healed granuloma or a small intrapulmonary lymph node. Although the probability of malignancy is low, the differential also includes early adenocarcinoma (particularly lepidic-type) and inflammatory nodules; however, none of these entities are suggested by the current imaging characteristics. Per the 2023 Fleischner Society recommendations for a solitary solid nodule ≤ 6 mm in an adult with no high-risk features, routine surveillance is not required; an optional low-dose CT at 12 months may be considered for patient reassurance. No uncertainty flags were generated by the AI analysis, and the nodule does not meet criteria for immediate additional imaging or intervention. AI-assisted analysis — clinical correlation required.

Generated by HealthATM AI (Groq/openai-gpt-oss-120b) — Clinical correlation required.