

Patient Case Studies

CyPath[®] Lung

KNOW MORE. MOVE FORWARD

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CyPath Lung

Patient Case “Joan”*: Abnormal Finding on LDCT in high-risk patient



Initial presentation



LDCT



CyPath® Lung

PATIENT BACKGROUND

- 72 yo WF with COPD, OSA with chronic respiratory failure on O2
- 50 PYHx smoker; quit 2021, using vape pen
- Presented with 14mm LUL cavitating nodule 3/2023
- 50-pound weight loss x 2 years

IMAGING

- PET scan 3/23/23 with LUL avidity SUV of 12.0
- CT scan 10/4/23 s/p LUL wedge resection for clinical stage 1A NSCCa
- CT scan 4/15/24 with subtle changes to LUL post-op resection site

NEXT STEPS w/o CYPATH LUNG

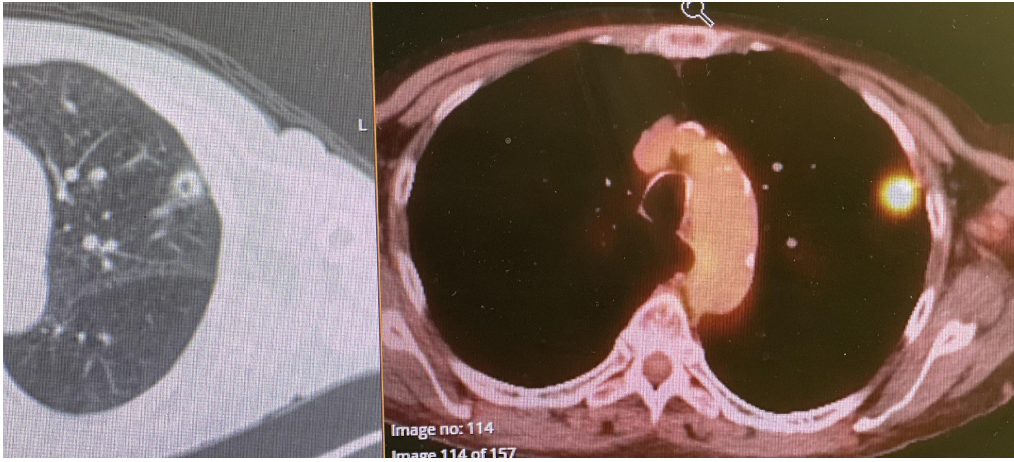
- Pt with wedge resection for stage 1A NSCCa requires close follow-up
- Serum marker contra-indicated x 5 years with cancer dx
- Subtle post-op changes common and represent diagnostic dilemma

NEXT STEPS with CYPATH LUNG

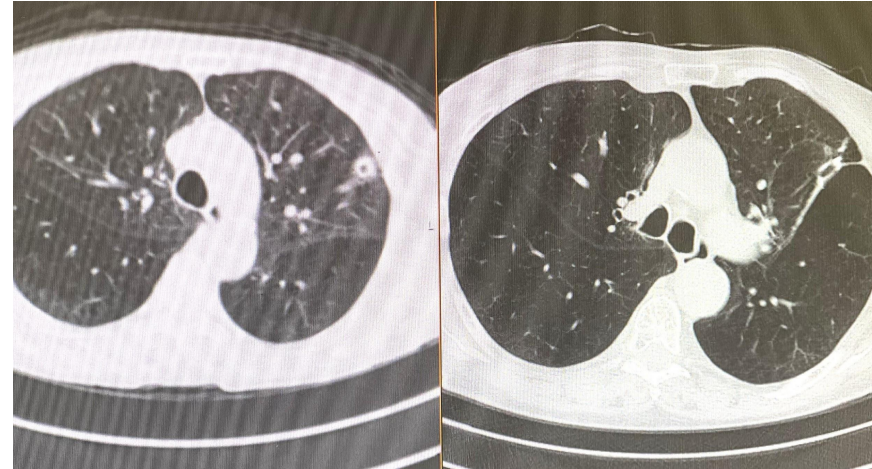
- CyPath® Lung reported 5/21/24, 0.83
- Because this represents a real-time possible recurrence, follow-up PET ordered 7/19/2024

**The patient described in this case study is a real individual; however, the name has been changed to protect his/her privacy.*

Patient Case **Joan**: Images from Initial LDCT



14 mm cavitating nodule, SUV 12



Pre- and post-op wedge resection, post-op increased nodularity from 10/4/23 to 4/14/24

Patient Case **Joan**: CyPath® Lung Report



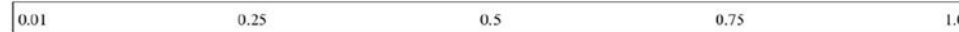
CyPath® Lung

Patient: [REDACTED]	Collection Date: 05/20/2024	Facility: [REDACTED]
Patient DOB/Age/ Sex: [REDACTED], 71, F	Received Date: 05/21/2024 10:26	Client ID Number: [REDACTED]
Patient ID:	Report Date: 05/22/2024 16:00	Ordering Physician: [REDACTED]
Accession Number: [REDACTED]	ICD 10 Codes:	Copies To:
	CPT Codes: 0406U X 1	

CyPath Lung Test Results

Patient Sample Result Values is 0.83

Assay Interpretation: **LIKELY LUNG CANCER**



Samples Adequate: yes
Number of Alveolar Macrophages per 10,000 = 228.96
Absolute Number of Cells for Analysis = 20571

Reference Range:

Very Unlikely:	>0.00	<0.10
Unlikely:	>0.10	<0.50
Likely:	>0.50	<0.90
Very Likely:	>0.90	<1.00

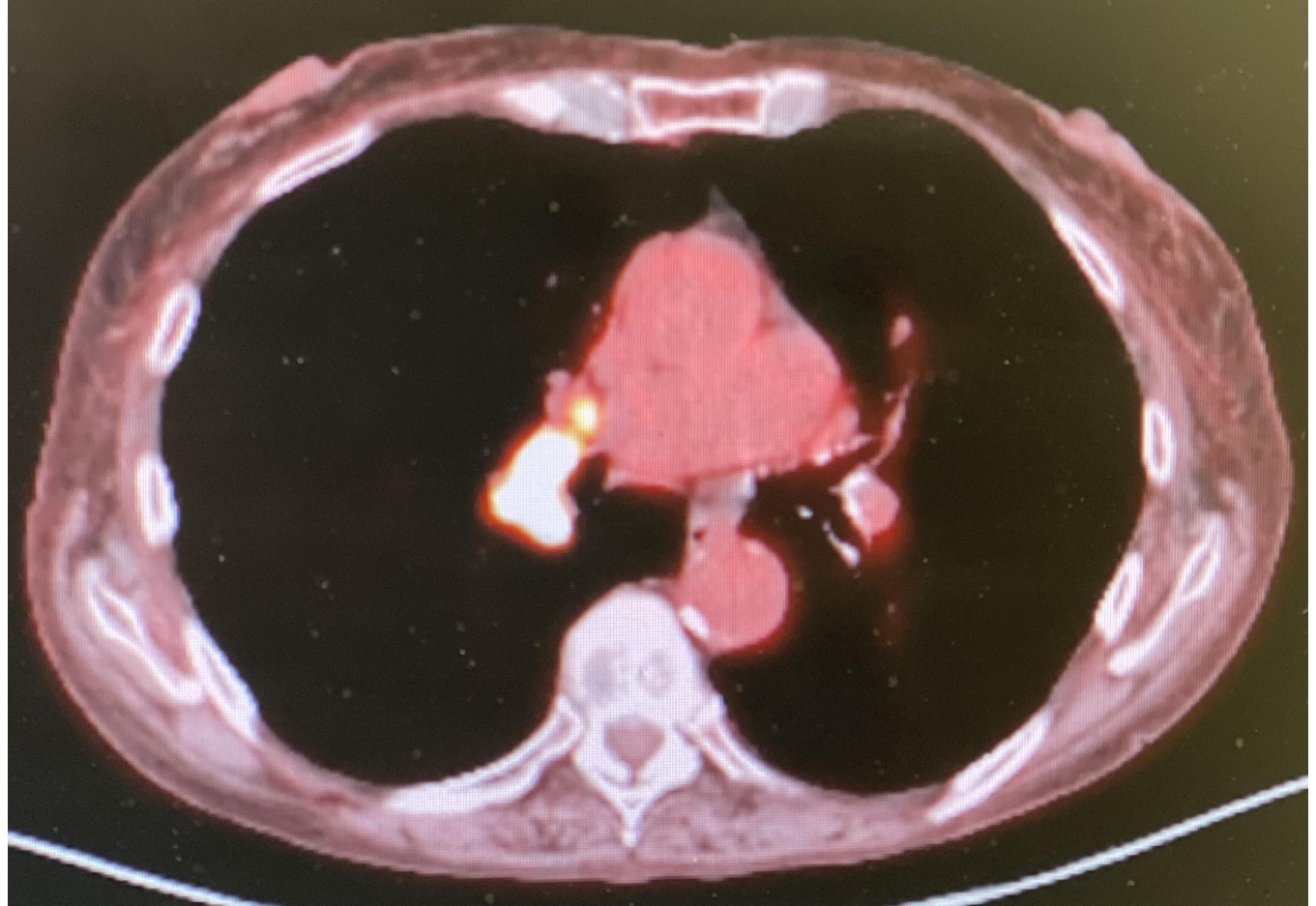
Signed By: [REDACTED]

Patient Case **Joan**: Follow-Up PET 7/19/24

CyPath® Lung of 0.82 leads to this PET

Post-op scar without avidity but right hilum and mediastinum grossly positive

Unusual presentation for metastatic NSCCa from LUL lesion



Patient Case **Joan**: Abnormal Finding on LDCT (continued)



Outcome



LDCT



CyPath® Lung



Outcome



PATIENT BACKGROUND

- Wedge resection LUL for 14 mm stage 1A NSCCa
- CyPath® Lung positive sputum 5/21/24 and positive PET 7/24 in lung and liver
- Follow-up liver biopsy dx metastatic small cell cancer, second primary lung cancer

IMAGING

- Serial CT scans post wedge resection on 10/23, 4/24
- PET scan 7/19/24

NEXT STEPS with CYPATH LUNG

- CyPath® Lung positive result led to PET scan with right lung right mediastinal and liver uptake
- Liver biopsy confirms new small cell lung cancer as second primary
- Original LUL was a stage 1A resected cancer

OUTCOME

- Pt is currently being treated for advanced stage small cell carcinoma of the lung