

# My Patient Has a Pulmonary Nodule

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# Management of Nodules

- No replacement for history and clinical acumen
- Goal of algorithm is to provide a guide for managing your patients and your time
- Fleischner Society Criteria
- Clinical algorithms

# Fleischner Society

## Recommendations Incidental Pulmonary Nodule Follow-up

### Recommendations for Follow-up and Management of Nodules Smaller than 8 mm Detected Incidentally at Nonscreening CT

Nodule Size (mm)*	Low-Risk Patient†	High-Risk Patient‡
≤4	No follow-up needed§	Follow-up CT at 12 mo; if unchanged, no further follow-up¶
>4–6	Follow-up CT at 12 mo; if unchanged, no further follow-up¶	Initial follow-up CT at 6–12 mo then at 18–24 mo if no change¶
>6–8	Initial follow-up CT at 6–12 mo then at 18–24 mo if no change	Initial follow-up CT at 3–6 mo then at 9–12 and 24 mo if no change
>8	Follow-up CT at around 3, 9, and 24 mo, dynamic contrast-enhanced CT, PET, and/or biopsy	Same as for low-risk patient

Note.—Newly detected indeterminate nodule in persons 35 years of age or older.

\* Average of length and width.

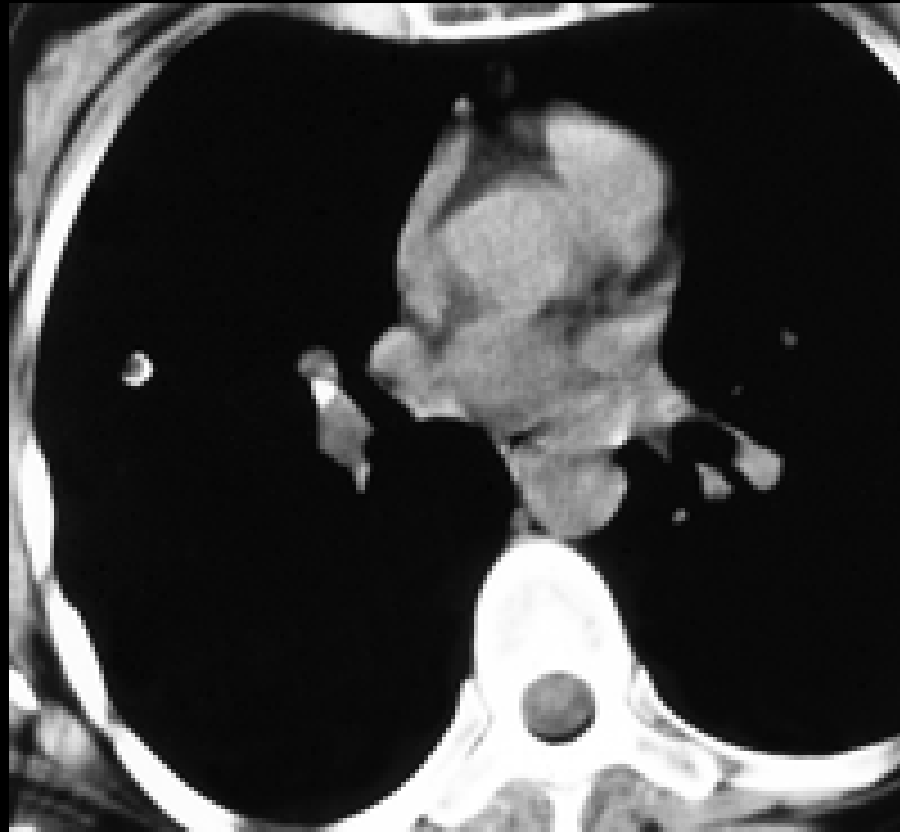
† Minimal or absent history of smoking and of other known risk factors.

‡ History of smoking or of other known risk factors.

§ The risk of malignancy in this category (<1%) is substantially less than that in a baseline CT scan of an asymptomatic smoker.

¶ Nonsolid (ground-glass) or partly solid nodules may require longer follow-up to exclude indolent adenocarcinoma.

How would you manage this  
nodule?



CT Scan shows a nodule

```
graph TD; A[CT Scan shows a nodule] --> B["<5mm Non calcified  
Solid  
Part solid"]; A --> C["<8mm  
Non solid"]; B --> D["Follow-up CT  
12 months"]; C --> D;
```

<5mm Non calcified  
Solid  
Part solid

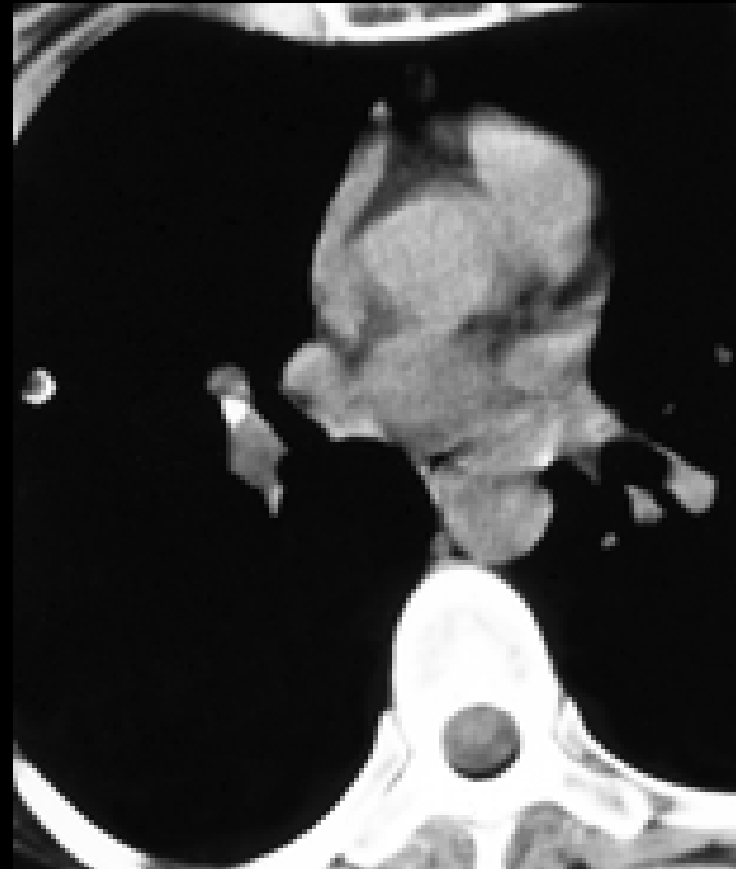
<8mm  
Non solid

Follow-up CT  
12 months

# Pulmonary Nodule

## Features

- Solid
- 5 mm
- 12 month



How would you manage this  
nodule?



CT Scan shows a nodule

5-14mm

Solid and Part solid

8-14 mm

Non solid nodule

>10mm solid nodule  
>10mm part solid nodule

PET Scan

3,12 month  
follow-up

Negative

Positive

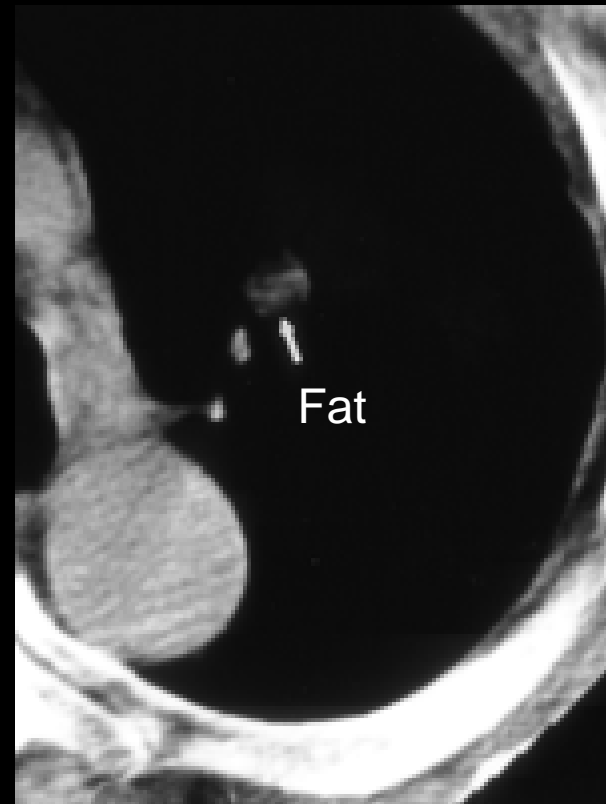
Biopsy



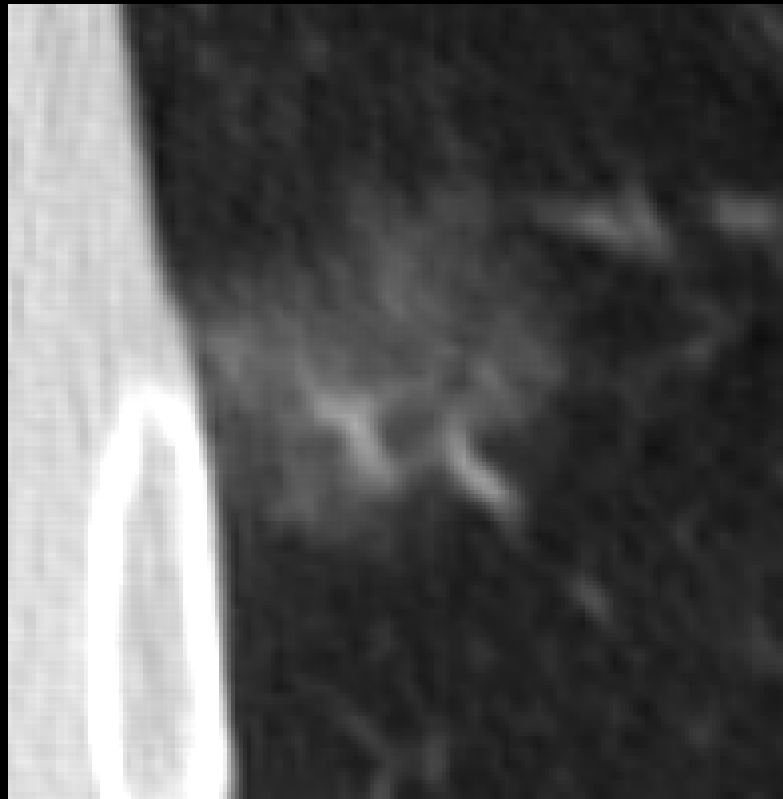
# Pulmonary Nodule

## Features

- Solid
- 8 mm
- 3 month
- 12 month



How would you manage this  
nodule?



CT Scan shows a nodule

5-14mm

Solid and Part solid

8-14 mm

Non solid nodule

>10mm solid nodule  
>10mm part solid nodule

PET Scan

3,12 month  
follow up

Negative

Positive

Biopsy

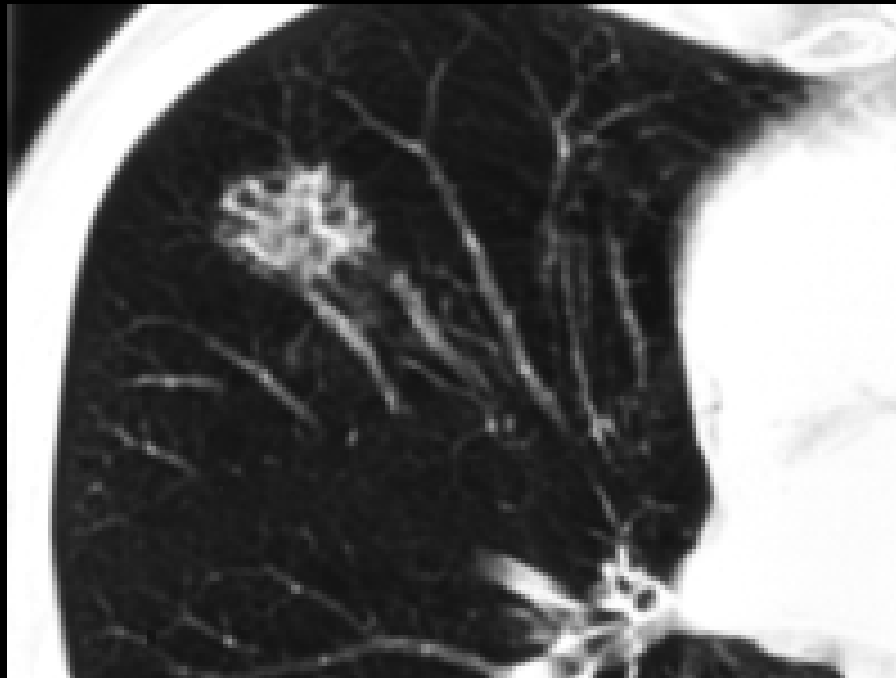
# Pulmonary Nodule

## Features

- Semi solid
- <15 mm
- Non calcified



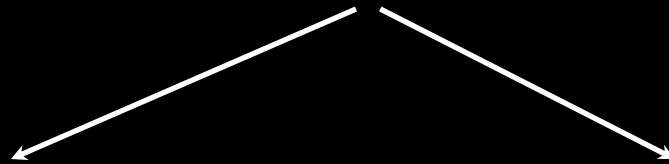
How would you manage this  
nodule?



CT Scan shows a nodule



Non calcified nodule >15mm



Inflammatory/Infectious Ill defined appearance

+/- Abx



CT Follow-up in 1 month

No change



CT Follow-up in 3 months



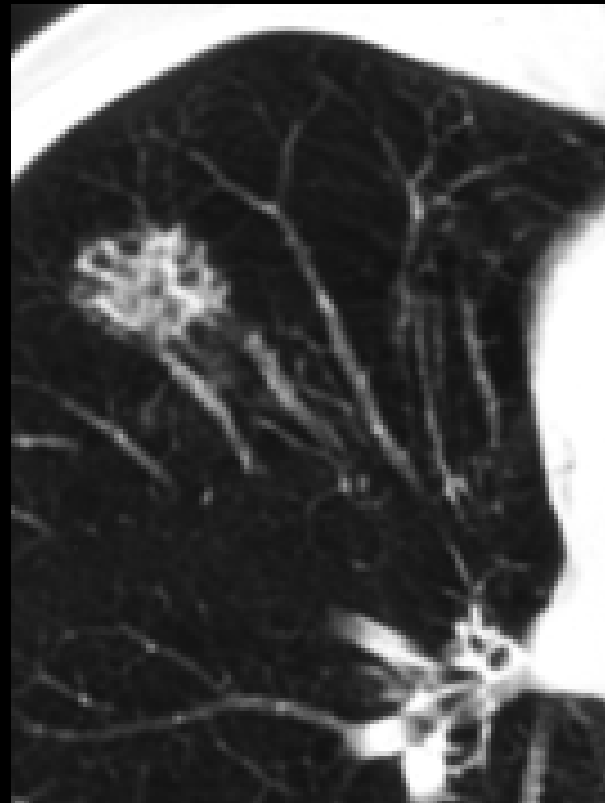
CT Follow-up in 12  
months



Biopsy

# Pulmonary Nodule

- <15 mm
- Solid and non solid components
- Solid component >10 mm
- PET/ 3 month follow-up



How would you manage this  
nodule?

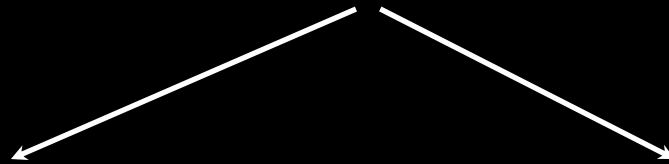




CT Scan shows a nodule



Non calcified nodule >15mm



Inflammatory/Infectious Ill defined appearance

+/- Abx



CT Follow-up in 1 month

No change



CT Follow-up in 3 months



CT Follow-up in 12  
months



Biopsy

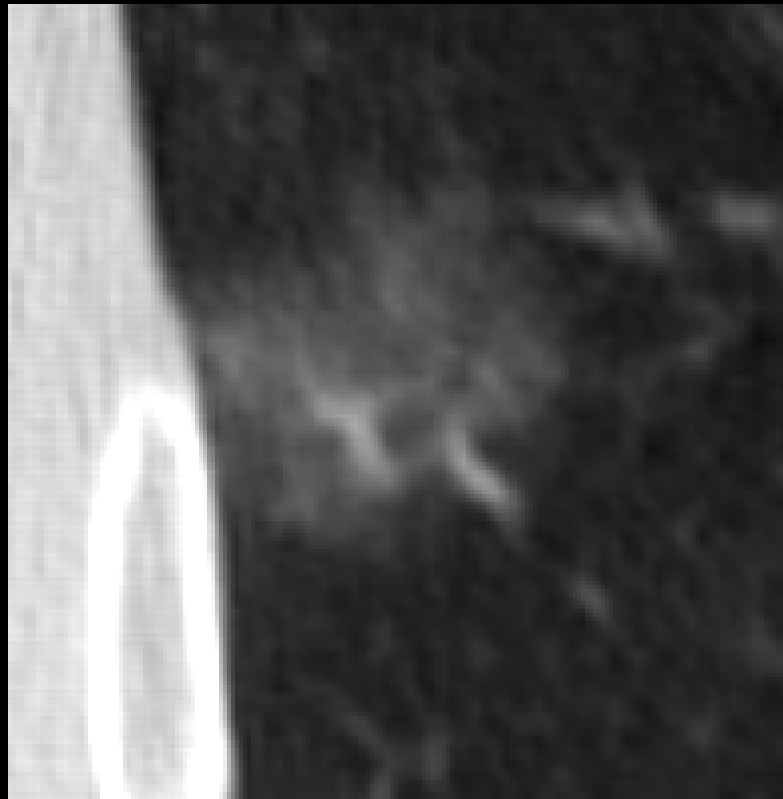
# Pulmonary Nodule

## Features

- $>15$  mm
- Solid
- Spiculated
- PET +  
Biopsy



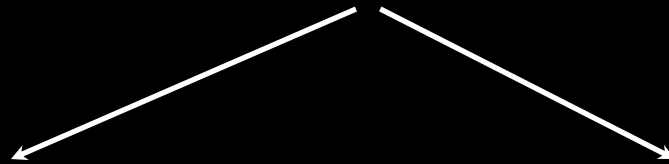
How would you manage this  
nodule?



CT Scan shows a nodule



Non calcified nodule >15mm



Inflammatory/Infectious Ill defined appearance

+/- Abx



CT Follow-up in 1 month

No change



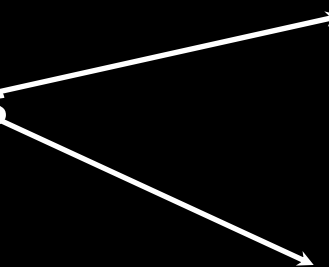
CT Follow-up in 3 months



CT Follow-up in 12  
months



Biopsy



PET

# Pulmonary Nodule

## Features

- Non calcified
- >15mm
- Follow-up



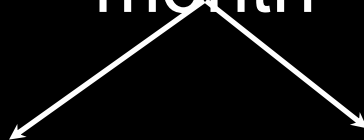
CT Scan Shows a  
Nodule



Endobronchial  
lesion



CT follow-up in 1  
month



Still  
Present

Resolved



Referral

Thank you