National Lung Cancer Screening Program for GPs – additional findings in a Tasmanian context

This webinar will begin soon.

National Lung Cancer Screening Program for GPs – additional findings in a Tasmanian context

Zoom webinar – Monday 24 November 6.30pm

Acknowledgement of traditional owners

We acknowledge the Tasmanian Aboriginal people as the traditional owners and ongoing custodians of the lands on which we are meeting today. We pay our respects to Elders past and present.

We would also like to acknowledge Aboriginal people who are joining us today.

Learning outcomes

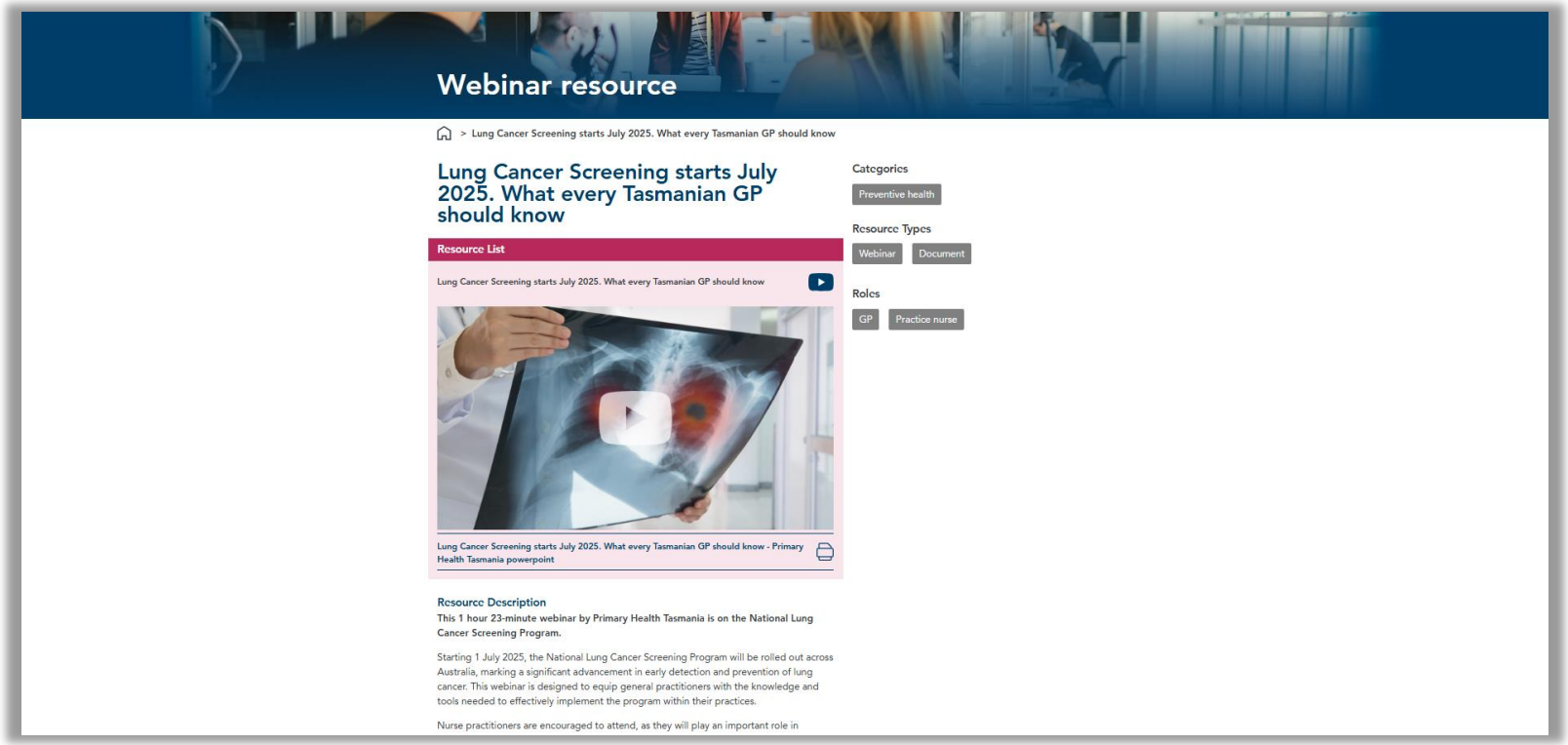
After this session, I will be able to:

- Differentiate between different types of additional findings
- Identify and evaluate coronary artery calcification
- Identify and evaluate emphysema and interstitial lung abnormalities
- Explain the appropriate referral pathways for additional findings that need non-GP specialist input

Some housekeeping

- Tonight's webinar is being recorded
- Please use the Zoom Q&A feature to ask questions
- At the end of the webinar your browser will automatically open an evaluation survey. We appreciate you taking the time to complete this to help us improve our events programme
- Please don't forget to register for your next webinar at: https://www.primaryhealthtas.com.au/for-health-professionals/events/

Watch the first session of the series



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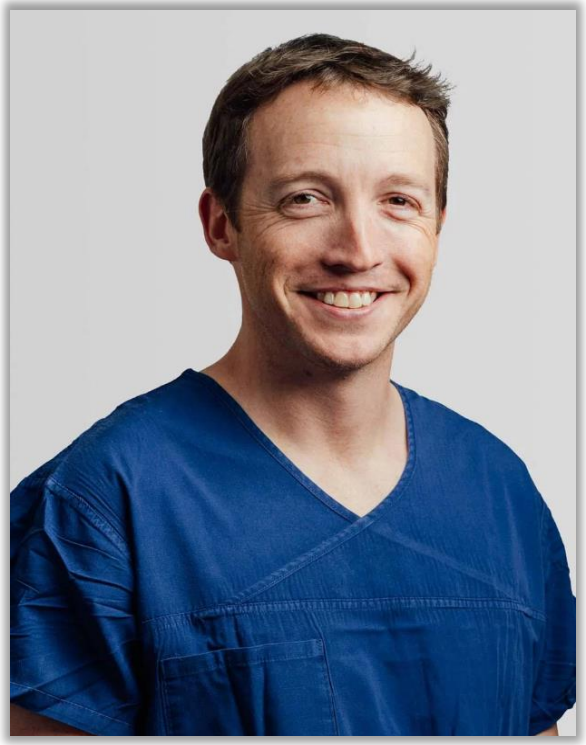
Presenters

Dr Robin Harle
Radiologist
Radiology Tasmania & Royal Hobart Hospital

Dr Miloš Nikolić
Respiratory and Sleep Medicine staff specialist
Department of Respiratory and Sleep Medicine, Tasmanian Health Service - South



Dr Andrew Black
Cardiologist
Tasmanian Health Service - South

National Lung Cancer Screening Program

Radiology Tasmania

Report

Structured Report

Stake holders

- Federal Government
- **Cancer Australia/**National Cancer Screening Register
- Telstra Health (IT)
- Referrer (you)

The format is not my fault. It's been designed by others and not aimed at you!

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What to look for on the report

Nodule Y/N?

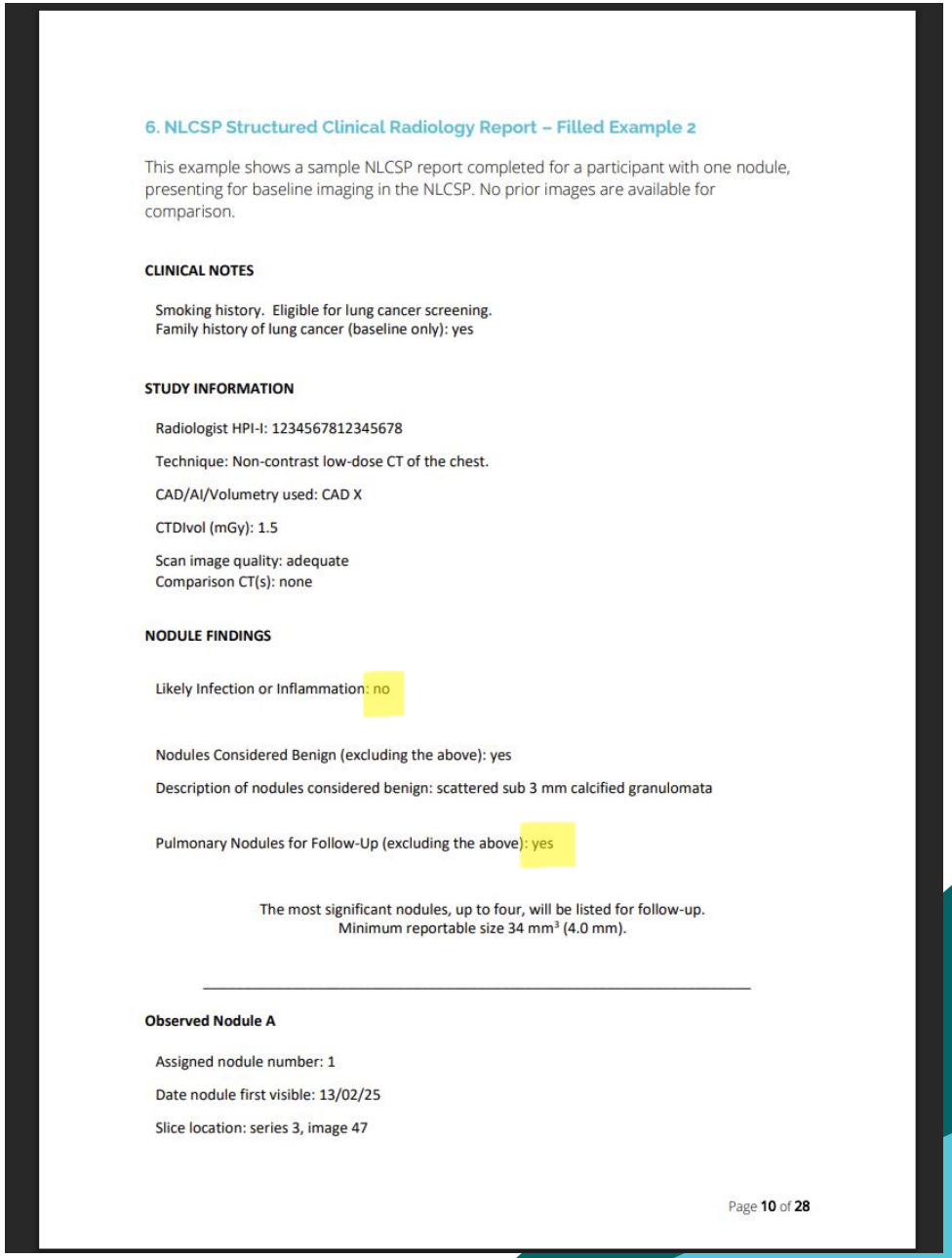
What is the chance of that nodule being a cancer?

When should I follow up?

Additional findings Y/N?

What to do about the additional finding?

Report



6. NLCSP Structured Clinical Radiology Report – Filled Example 2

This example shows a sample NLCSP report completed for a participant with one nodule, presenting for baseline imaging in the NLCSP. No prior images are available for comparison.

CLINICAL NOTES

Smoking history. Eligible for lung cancer screening.
Family history of lung cancer (baseline only): yes

STUDY INFORMATION

Radiologist HPI-I: 1234567812345678

Technique: Non-contrast low-dose CT of the chest.

CAD/AI/Volumetry used: CAD X

CTDIvol (mGy): 1.5

Scan image quality: adequate
Comparison CT(s): none

NODULE FINDINGS

Likely Infection or Inflammation: no

Nodules Considered Benign (excluding the above): yes

Description of nodules considered benign: scattered sub 3 mm calcified granulomata

Pulmonary Nodules for Follow-Up (excluding the above): yes

The most significant nodules, up to four, will be listed for follow-up.
Minimum reportable size 34 mm^3 (4.0 mm).

Observed Nodule A

Assigned nodule number: 1

Date nodule first visible: 13/02/25

Slice location: series 3, image 47

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Report

Anatomical location: RUL

Type: part solid

Spiculation: yes

Maximal axial diameter for PanCan calculation (mm): 10.4
Total volume (mm^3): 524

Volume, solid component (mm^3): 360

PanCan risk (%, baseline only): 24

Screening Category (this nodule): 4

ADDITIONAL FINDINGS

Actionable additional findings from this study: yes

Lungs: n/a

Pleura: n/a

Mediastinum: n/a

Cardiovascular: n/a

Abdomen: yes. 2.5 cm intermediate density (40 HU) lesion arising from the upper pole of the left kidney.

Thyroid: n/a

Breast: n/a

Bone: n/a

Other: n/a

CONCLUSION

Screening Category and Management: Category 4; 3-month LDCT.

Actionable Additional Findings Summary: Indeterminate kidney lesion. Refer for renal ultrasound.

Where possible, the participant is recommended to return to the same imaging provider for future studies to facilitate image comparison.

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Additional Findings

Only ACTIONABLE Additional Findings reported

Please follow the guidelines!

We have tried to limit how much we bring to your attention

Non important, benign findings should not be reported

Some radiologists have more of a problem with this than others!!

Additional Findings

- Lungs
- Pleura
- Mediastinum
- Cardiovascular
- Abdomen
- Breast
- Thyroid
- Bones
- Other

Lungs

- Emphysema
  - Mild, moderate, severe or panlobular
- Bronchiectasis
  - Moderate or severe
- ILA – high risk
- ILA – low risk
- Diffuse Cystic Lung Disease
- Diffuse Nodular Lung Disease

Pleura, Mediastinum and Cardiovascular

- Pleural effusion, thickening or mass
- Calcified pleural plaques
- Mediastinal lymph nodes >15mm
- Mediastinal mass (not cyst)
- Coronary Arterial Calcified Plaque
  - Mild, moderate or severe
- Aortic valvular calcification
  - Moderate or severe
- Pericardial effusion
  - Moderate or large
- Thoracic aortic dilatation
  - >45mm
- Pulmonary artery dilatation
  - >32mm or > aorta

Abdomen

- Liver
  - Focal lesion
    - >1cm, not simple cyst
  - Steatosis
    - <40 HU or <10 HU below spleen HU
  - Cirrhosis
- Kidney
  - Focal lesion >1 cm, between 21 and 69 HU
- Adrenal Lesion
  - Benign, likely benign or suspicious
- Abdominal aortic aneurysm
  - >42mm
- Pancreas
  - Mass; or cyst >10mm

Breast and Bones

- Suspicious breast lesion
- Axillary lymphadenopathy
- Thyroid goitre
- Suspicious thyroid nodule
  - >15mm or other suspicious features
- Bones
  - Reduced bone density > 100HU
  - Compression fractures of >20%

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What have we found so far?

- From RANZCR ASM – Prof Catherine Jones
- As of 17/10/2025
  - 23904 scans performed
  - 255 enrolments/day
  - Male 55.8%
  - Female 44.2%
  - Very low risk (Cat 1) 15687
  - Low to moderate risk (Cat 2-4) 2283
  - High or very high risk (Cat 5 or 6) 273

- NB several ineligible patient sent for screening
- <50 or >70
- We can't enrol even if you pay us
- Can do same scan but report more usual but no reminder notices to rescan

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Prof Jones Numbers in Queensland

- 4606 cases
- Male 66%
  - av. age 60.8
- Female 44%
  - av. Age 61.0
- Family History in 14.6%
- Reportable nodules about 15%
  - <60 12.5%
  - >60 17.5%
- 83% Category 1

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Age

- <60
  - Reportable nodules 12.5%
  - Cat 5/6 0.7%
- >60
  - Reportable nodules 17.5%
  - Cat5/6 2.1%
- Age and Family History
  - <60 –ve
    - 0.6%
  - <60 +ve
    - 1.8%
  - >60 –ve
    - 1.8%
  - >60 +ve
    - 2.2%

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Additional Findings

- Emphysema 31%
- Coronary artery calcification 58%
- Reduced bone density 19%
- Vertebral compression fracture 9%
- ILA 7%
- Breast Lesion 1%
  - <50% patients female!

- MESA
  - Estimated probability for non-zero calcium score for a 60 y.o. white male is 68%
  - Estimated probability for non-zero calcium score for a 60 y.o. white female is 32%

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Additional Findings Recommendations

- Hopefully self-explanatory
- Standardised – must be word for word
- I can't alter them
- Usually, clinical correlation with suggestion for imaging follow up or consideration of specialist referral
- Have had input from all craft groups

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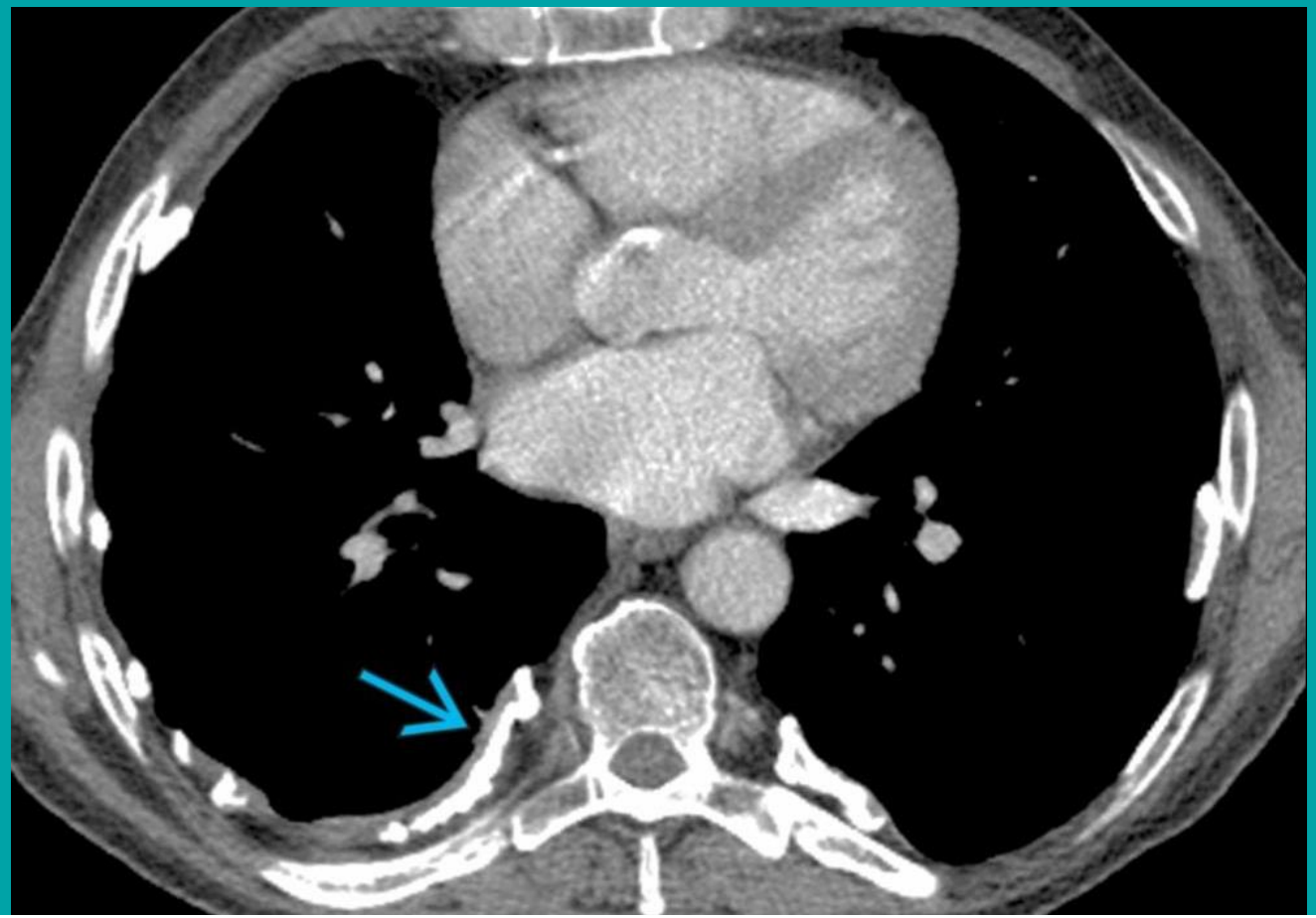
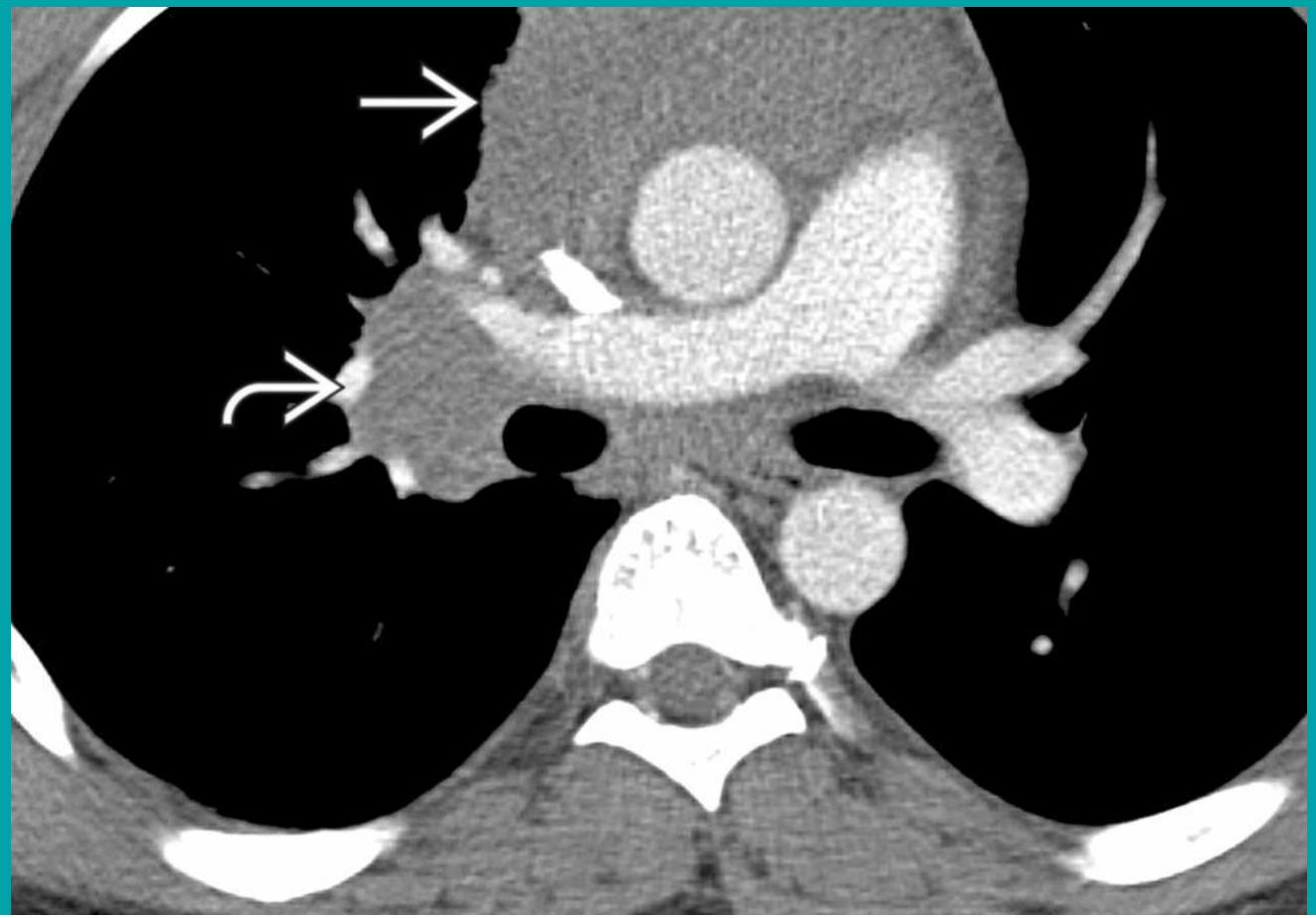
Images!!

Axial CECT of a patient with prior asbestos exposure shows bilateral calcified and noncalcified pleural plaques involving the undersurfaces of anterior and posterior ribs as well as along the paravertebral pleura (cyan solid arrow).



Axial CECT of a 65-year-old-old woman with metastatic stage IV breast cancer shows a large malignant exudative left pleural effusion that inverted the left hemidiaphragm with multiple enhancing pleural nodules and pleural thickening (white solid arrow). Pleural nodules may be subtle on CT. Intravenous contrast and thicker slices increase the conspicuity of these abnormalities.

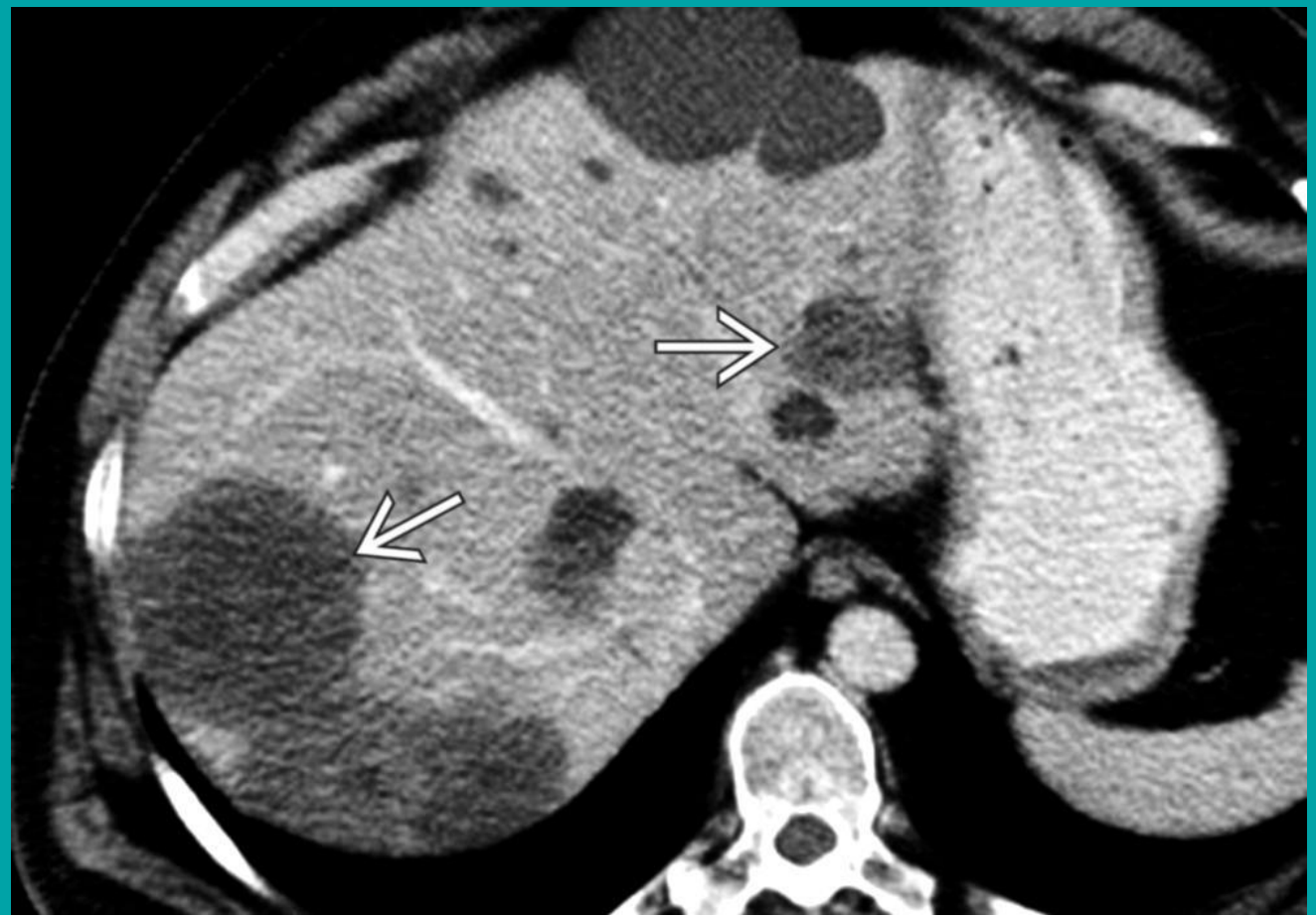
Axial CECT of a 23-year-old man with Hodgkin lymphoma shows coalescent prevascular mediastinal (white solid arrow) and right hilar lymphadenopathy (white curved arrow). Unilateral hilar lymphadenopathy should raise concern for malignancy.



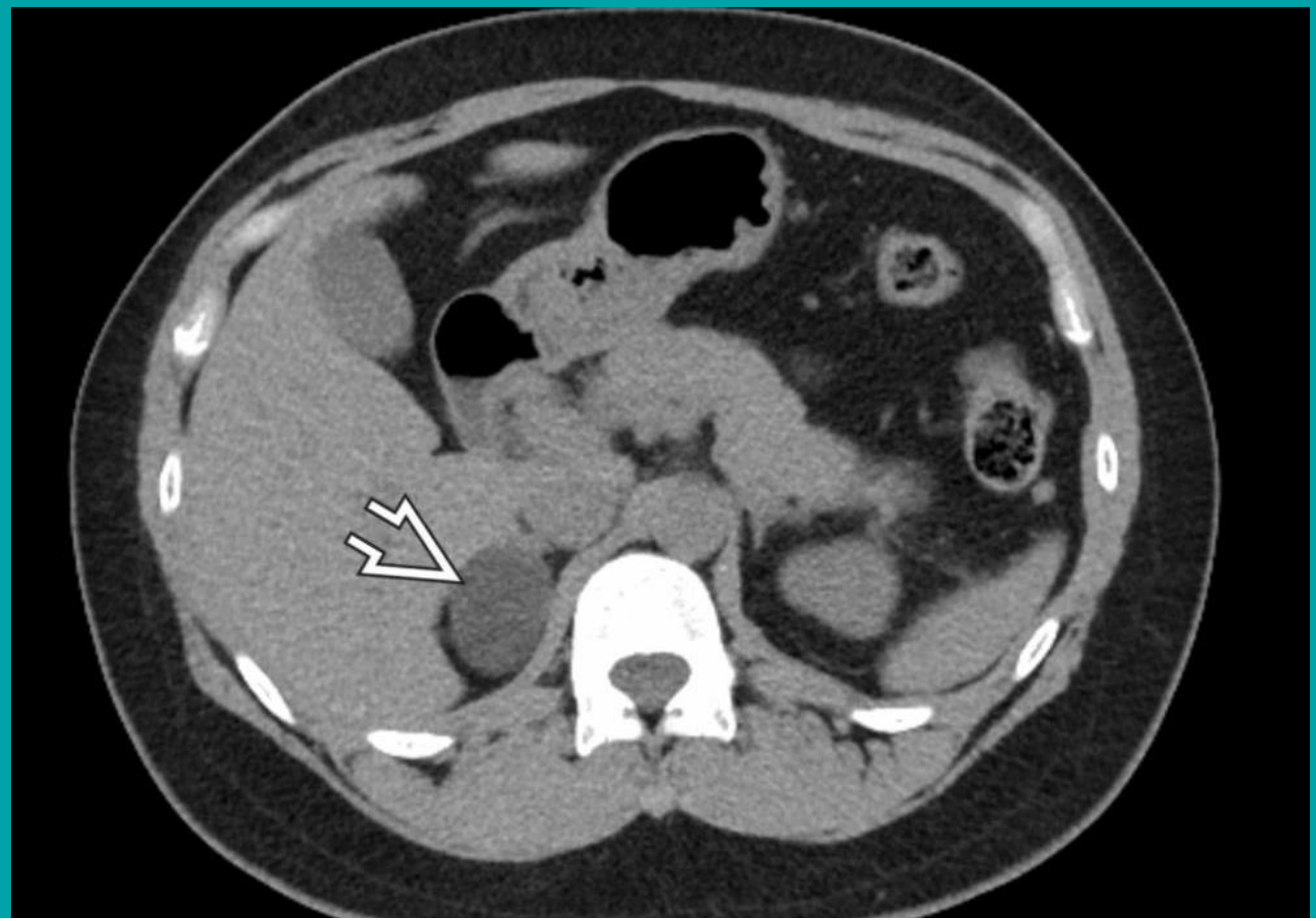
Axial NECT shows diffuse low attenuation of the liver.
Note relative hyperdensity of the vessels and spleen.

Axial CECT shows multiple spherical liver lesions (white solid arrow) with a target appearance. This is the most typical appearance for liver metastases, especially from colon cancer. Also note the focally dilated bile ducts (white curved arrow) due to compression by the metastases.

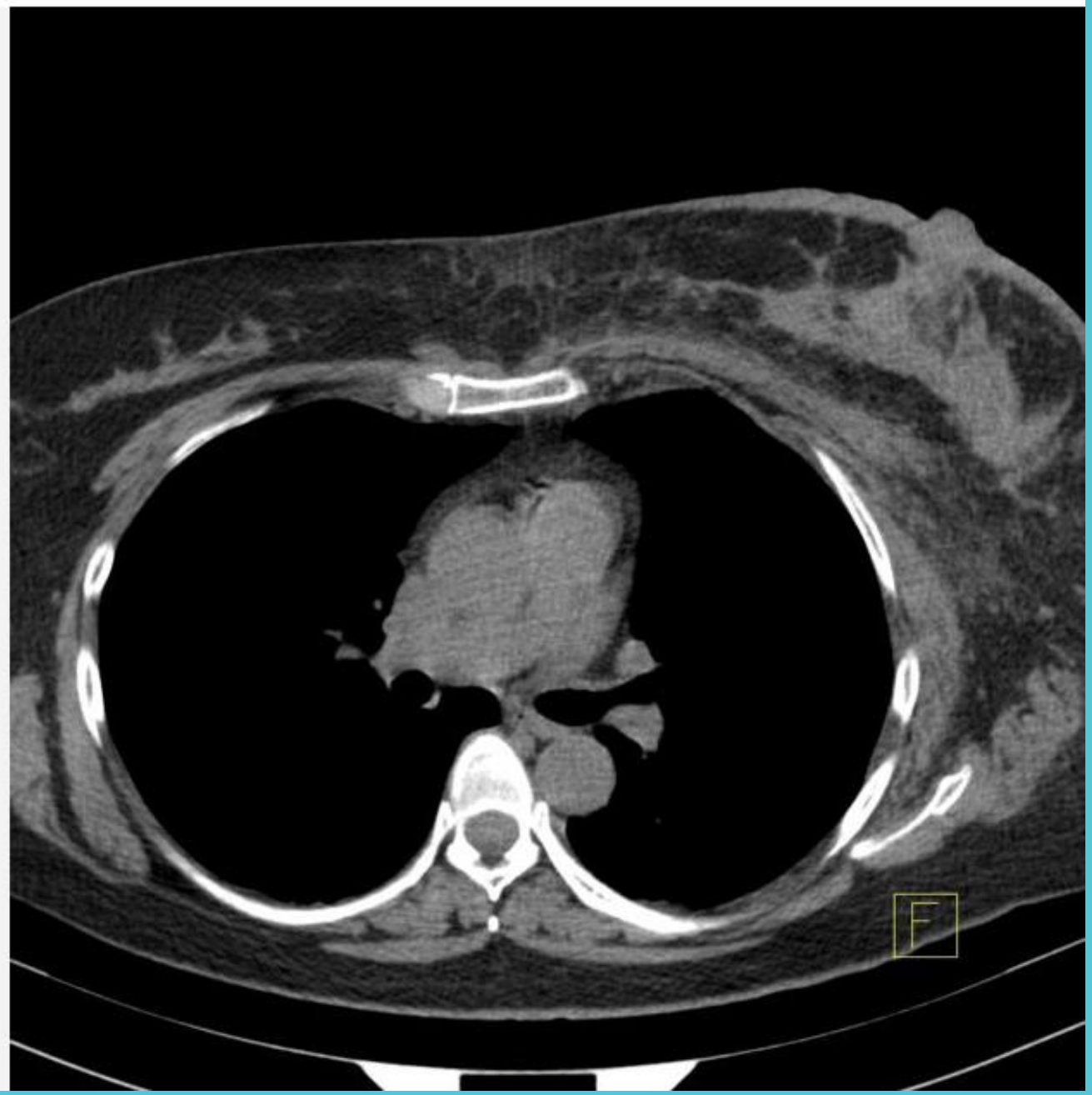
Axial CECT shows multiple hepatic masses that have important differences in appearance. Multiple hepatic cysts (white curved arrow) are water density and homogeneous, whereas multiple foci of tumor (white solid arrow) are heterogeneous and enhancing compared with NECT images.



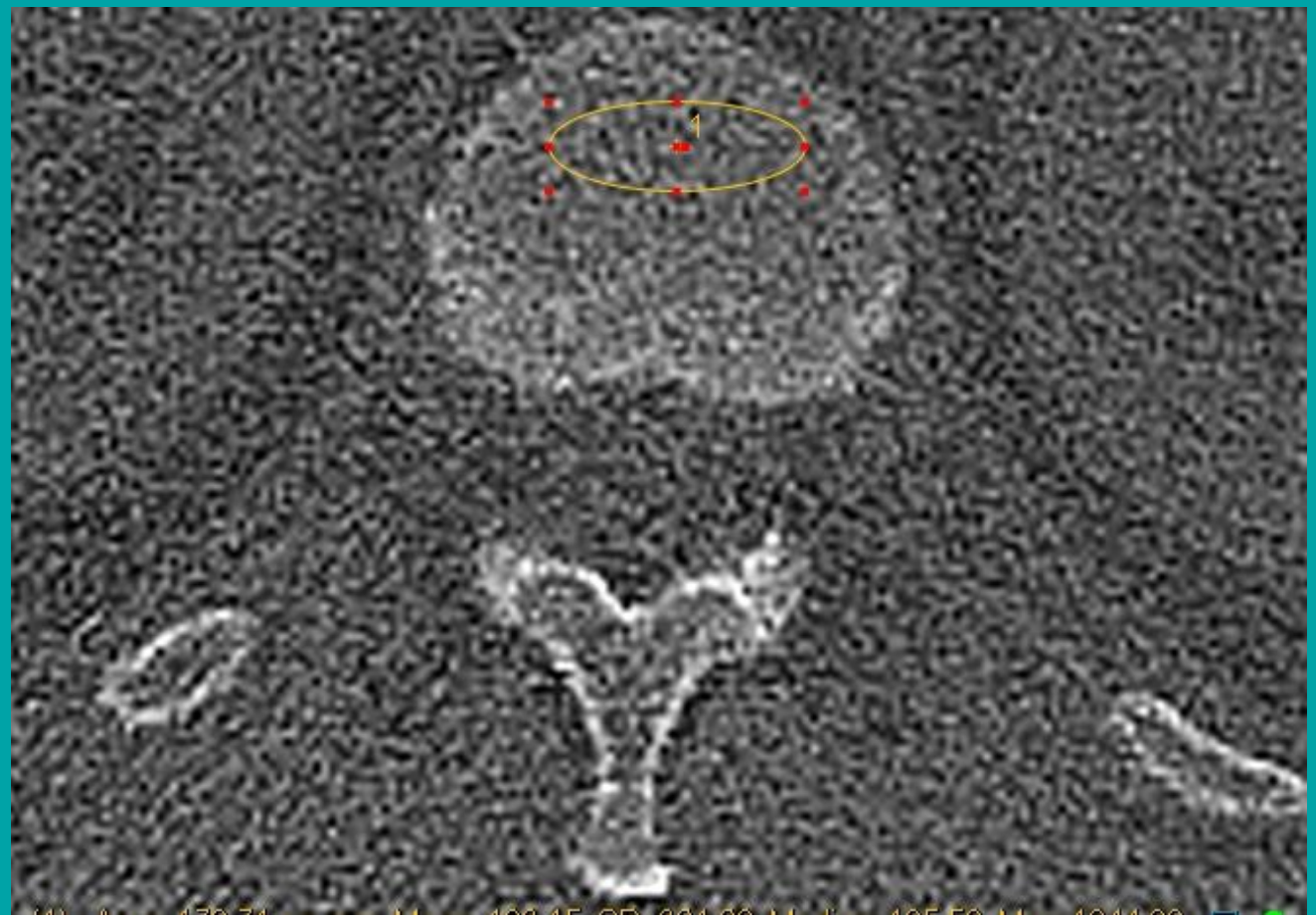
Axial NECT in a 34-year-old woman with elevated 24-hour urine cortisol and Cushing syndrome shows a low-attenuation (-6 HU) right adrenal mass (white open arrow), confirmed to be adrenal adenoma at surgery.



Axial CECT in a 72-year-old woman with serous ovarian cancer shows a 9-cm, heterogeneously enhancing right adrenal mass (cyan open arrow) and an enlarged gastrohepatic lymph node (white open arrow).



Measuring Bone Density L1



Thank you for your attention

Dr Robin Harle

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NLCSP - Incidental respiratory findings and update on the program so far..

DR MILOŠ NIKOLIĆ

Incidental respiratory findings + program update

Approximately 50% of NLCSP scans have an incidental findings, thoracic or otherwise.

Will briefly cover the most common thoracic findings, initial management, and when to refer for Respiratory assessment.

Review of data from first 3 months of screening in Tasmania + overview of patients referred to RHH Respiratory so far due to screening findings.

Incidental respiratory findings

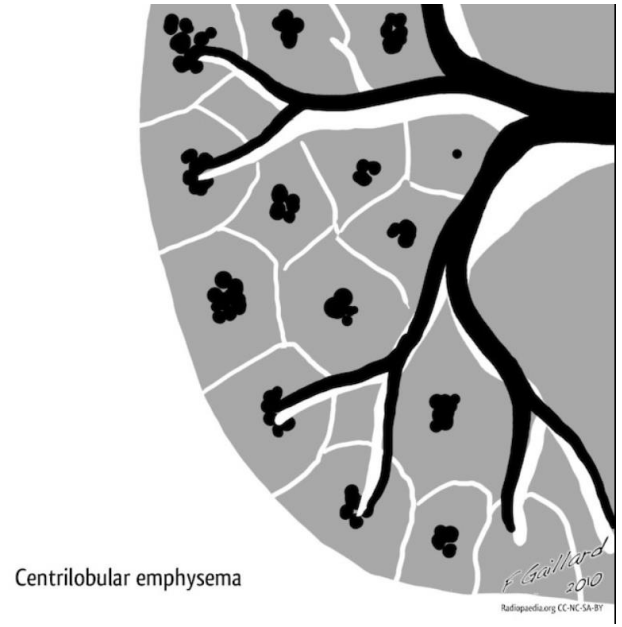
RANZCR in conjunction with RACP and TSANZ have put together guidelines for the reporting and management of incidental findings from NLCSP scans

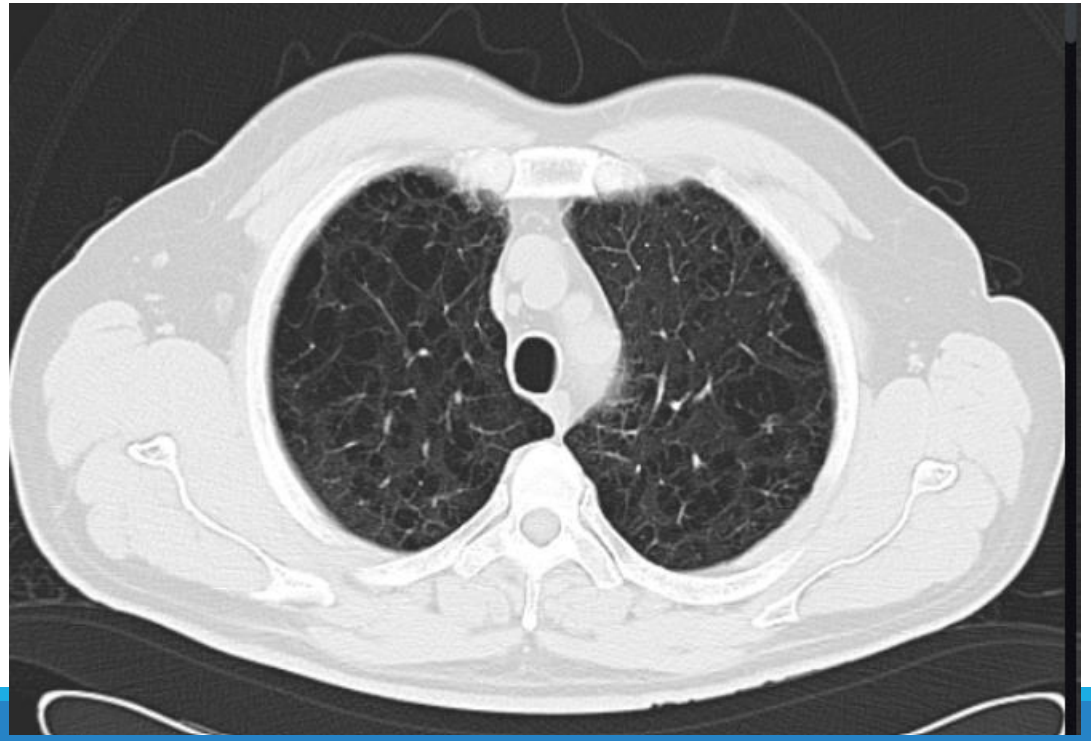
- https://www.ranzcr.com/college/document-library/nlcsp-additional-findings-guidelines
- https://www.racgp.org.au/FSDEDEV/media/documents/Clinical%20Resources/Guidelines/Supporting-Guidance-for-Primary-Care-for-the-NLCSP.pdf

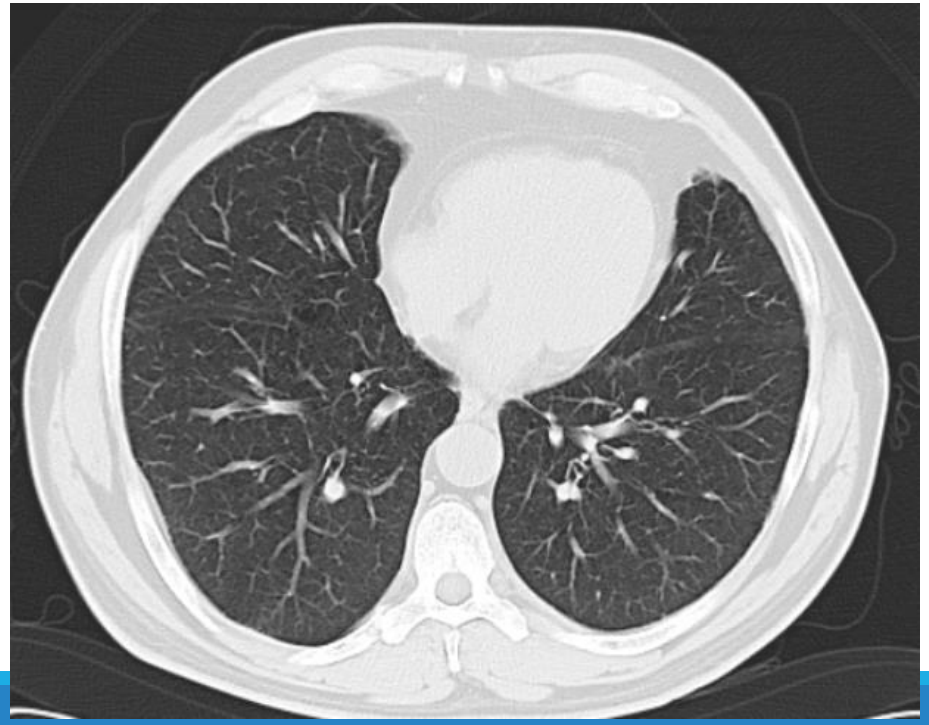
Emphysema

Centrilobular

- Most common
- Upper zone predominance





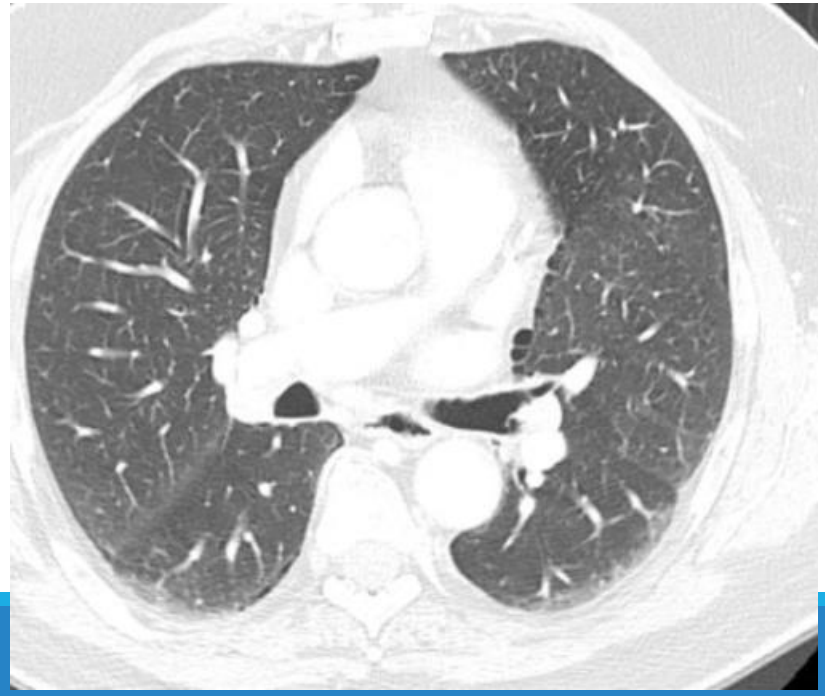


Emphysema

Paraseptal

- Affects peripheral parts of pulmonary lobules
- Formation of bullae, pneumothorax risk
- Pleural surfaces and close to fissures
- More common with high inhalation pressures
  - Water pipe vs cigarette

Paraseptal emphysema

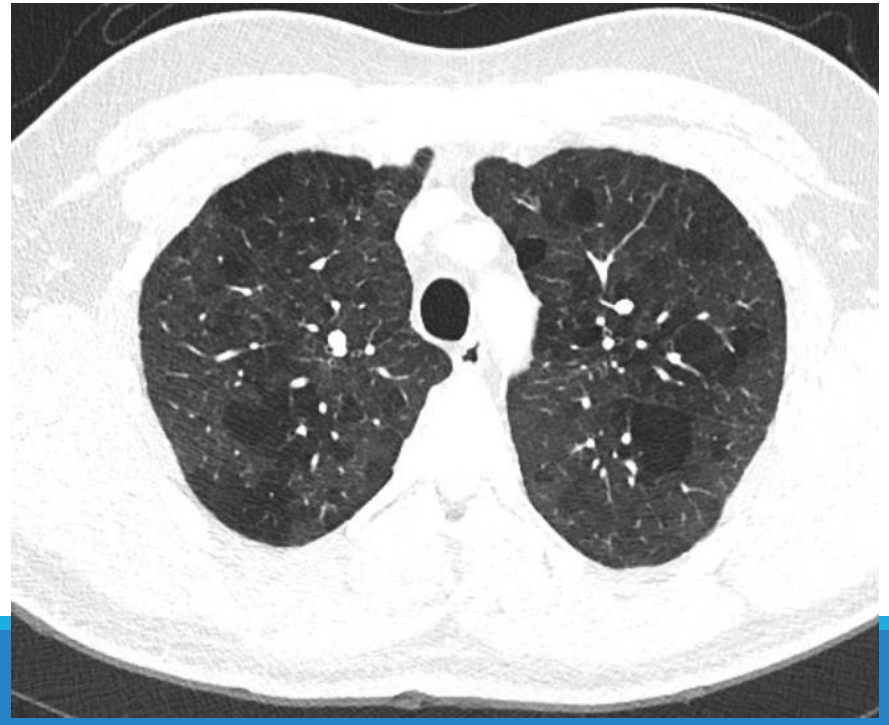


Emphysema

Panlobular/panlobar

- Affects entire secondary pulmonary lobule
- More pronounced in lower zones
- Particularly combination of A1AT + smoking

Panlobular emphysema



Emphysema

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Lungs		
Emphysema *1,2,3	*Mild (< 25% of lung volume), moderate (25-50%) or severe (> 50%)* – report *Panlobular* - report	• Clinical review. ***Supporting Guidance*** • The COPD-X Handbook is available on the Lung Foundation Australia website

Approx 50% of scans will detect emphysema.

Clinical review - do they have COPD or radiological emphysema only?

- Lung function for most, unless truly asymptomatic.

Initial Rx - Smoking cessation, stepwise pharmacotherapy, inhaler technique, exercise, pulmonary rehabilitation, vaccinations, prompt treatment of infections, development of action plans, optimisation of psychosocial contributors.

Respiratory input - macrolide therapy, long-term oxygen therapy, lung volume reduction, non-invasive ventilation, lung transplant assessment.

Bronchiectasis

- Dilation of small airways due weakness of muscular and elastic layers. Impaired clearance of secretions predisposes to infections.
  - Congenital – Cystic fibrosis, primary ciliary dyskinesia, primary immunodeficiencies.
  - Acquired – post-infective (incl. TB), chronic aspiration, radiation.

Bronchiectasis

Finding	Reporting recommendation	Management recommendation for reported findings	Reference/source
Bronchiectasis	*Mild (dilated bronchi, but internal bronchial luminal diameter < 2 times that of adjacent artery)* – do not report *Moderate or severe* – report	Clinical review for symptoms. Consider sputum microbiology and airway clearance recommendations. If symptomatic, consider referral to respiratory physician.	ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer (2) Expert opinion (ANZSTR and TSANZ).

No real benefits from early detection/if asymptomatic.

Probable increased number of scans overall due to inflammatory nodules/more repeat scans.

Initial Rx - Sputum MCS to guide antimicrobial therapy. Prompt treatment of infections, development of action plans, vaccinations, sputum clearance devices, chest physiotherapy, pulmonary rehabilitation.

Respiratory input – assessment for underlying causes, assessment for concomitant NTM, macrolide therapy, long-term oxygen therapy, lung transplant assessment.

Interstitial lung abnormality

Terminology can be confusing – “ILA/early ILD/subclinical ILD/established ILD”

- Distinguished from ILD essentially by presence of symptoms and whether ILD is suspected

ILA

- Must be incidental, does not include changes in high-risk populations (e.g. known CTD)
- >5% of any lung zone affected, non-dependent change

ILD

- Clinically suspected interstitial lung disease + radiological change + lung function change
- Usually symptomatic

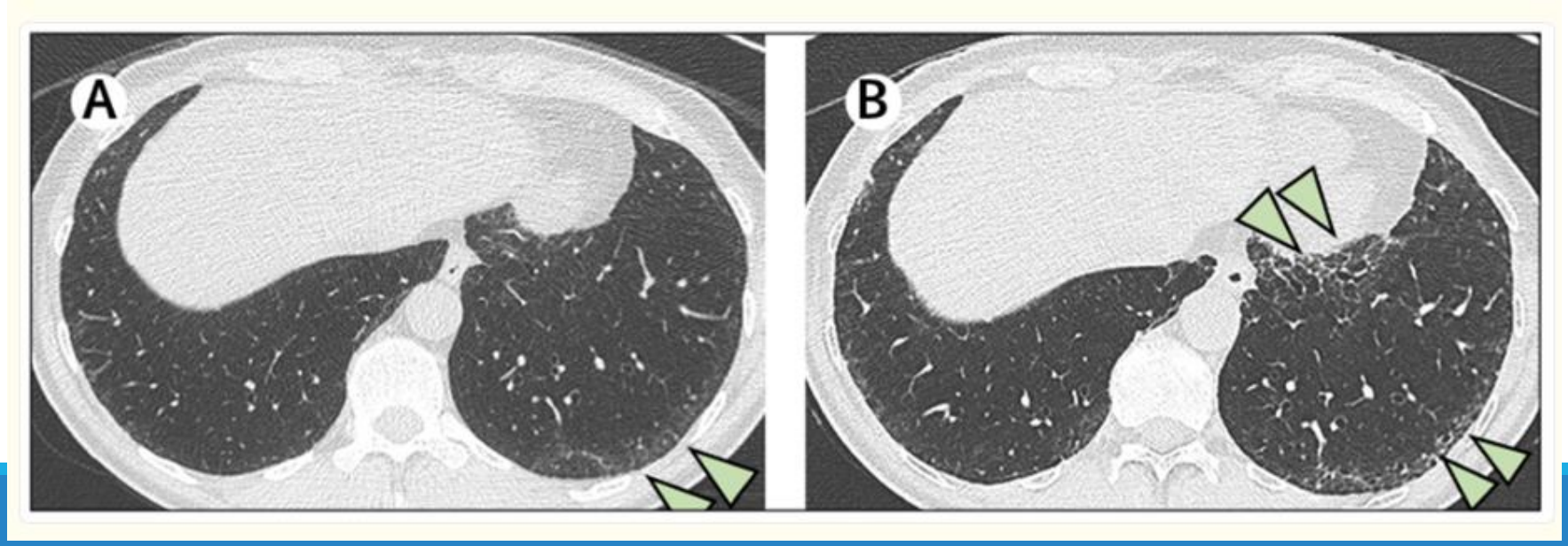
Interstitial lung abnormality

Should be further assessed with a dedicated HRCT

- Thin slices – <1.5mm
- Prone imaging – dependent atelectasis/fluid
- Expiratory views – air trapping

ILAs can progress to ILD

- Up to 40% progress radiologically over 5 years
- Potentially represent an area where early detection can be helpful – e.g. treatable underlying cause



Interstitial lung diseases

Best practice to be diagnosed through an ILD MDT

- Radiologist + respiratory physician +/- rheumatologist +/ pathologist
- Consensus diagnosis, diagnostic confidence, suggested management

Many ways to classify, broadly:

- ILD with known cause or association
  - CTD, sarcoidosis, occupational, environmental/hypersensitivity pneumonitis, drugs
- Idiopathic ILDs
  - Idiopathic pulmonary fibrosis (IPF)
  - Non-specific interstitial pneumonia (NSIP)
  - Cryptogenic organizing pneumonia (COP), acute interstitial pneumonia (AIP)
  - Respiratory bronchiolitis ILD (RB-ILD), desquamative interstitial pneumonia (DIP), lymphoid interstitial pneumonias (LIP)
- Other
  - Lymphangioleiomyomatosis (LAM), Pulmonary Langerhans cell histiocytosis

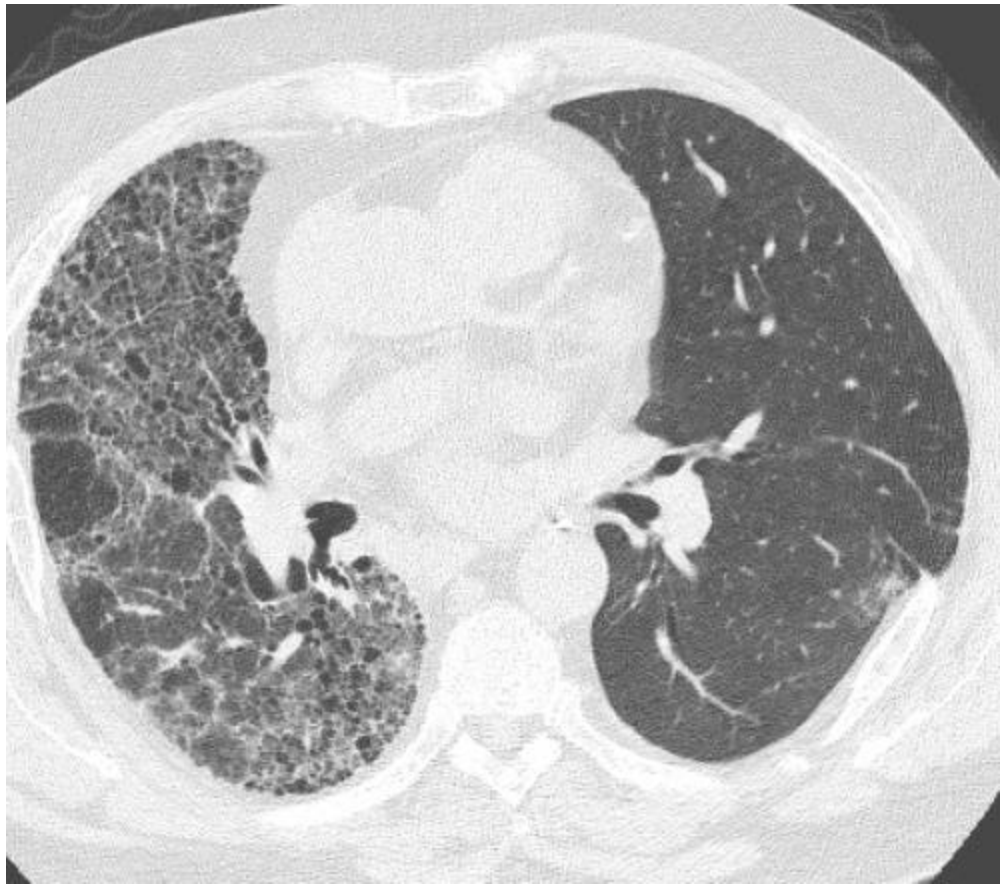
UIP

Radiological pattern of UIP is typical for:

- Idiopathic pulmonary Fibrosis (IPF)
- Asbestosis
- Some medication toxicity – e.g. amiodarone
- Rheumatoid arthritis associated ILD

Can be the pattern for some CTD ILD

- Scleroderma (though more commonly NSIP)
- Polymyositis, dermatomyositis (can also be NSIP)



UIP

Typical features include:

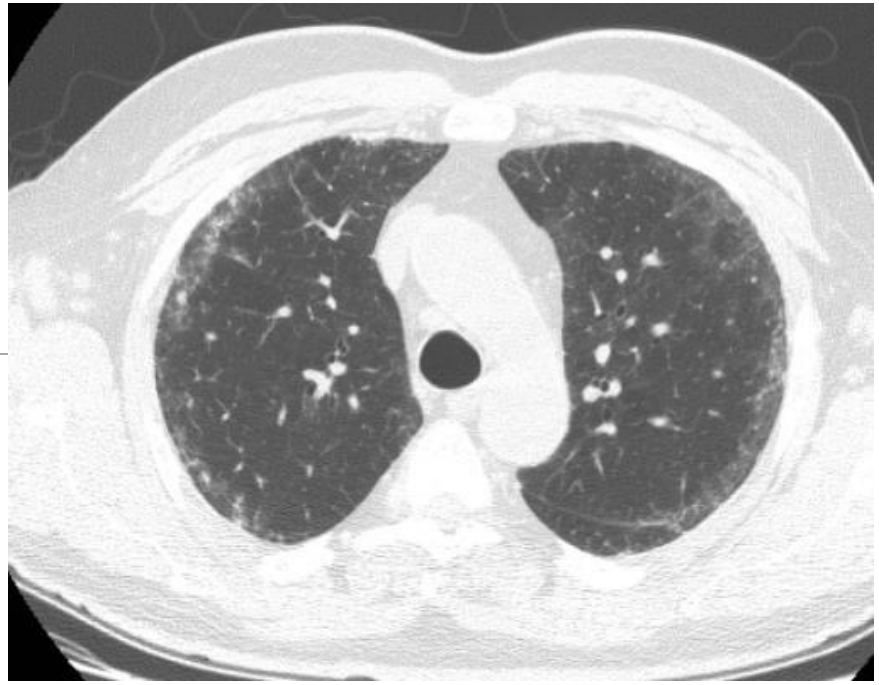
- Honeycombing, esp. if >5%
- Reticular opacities
  - Must predominate over ground glass changes
- Subpleural and basal predominance
- Architectural distortion, traction bronchiectasis, volume loss

Can often begin with similar ratio of ground glass to reticular opacity in early stages before progressing.

NSIP

Typical features include:

- Ground glass predominance
- Usually bilateral and symmetrical
- Diffuse or basal predominant
- Immediate subpleural sparing



NSIP

Typical features include:

- Ground glass predominance
- Usually bilateral and symmetrical
- Diffuse or basal predominant
- Immediate subpleural sparing

Fibrotic NSIP can have:

- Reticular opacities
- Traction bronchiectasis
- Honeycombing

NSIP

Typical pattern in most connective tissue disease ILD:

- Scleroderma (though can have UIP)
- Sjogren's
- Dermatomyositis, polymyositis
- Primary biliary cholangitis
- GVHD
- Myelodysplastic syndromes

Typically more responsive to immune suppression (esp. before onset of fibrotic change).

Interstitial lung abnormality

Interstitial lung abnormality † 2,4,5	*Interstitial lung abnormality with high-risk features (honeycombing, reticulation, traction bronchiectasis or progression)* – report
	
	Interstitial lung abnormality, stable or without high-risk features – report
		• *Interstitial lung abnormality with high-risk features:*
		  ○ Clinical review (symptoms, family history, auscultation for crackles etc).
		  ○ Order high resolution CT chest (including prone acquisition).
		  ○ Refer to a respiratory physician.
		• *Interstitial lung abnormality without high-risk features:*
		  ○ Clinical review (symptoms, family history, auscultation for crackles etc).
		  ○ Imaging findings will be assessed at next screening low-dose CT.
		
		Supporting Guidance
		• Information about Interstitial Lung Disease including guidance on Diagnosis and Monitoring, Management, and Resources for patients, are available on the Lung Foundation Australia website.

ILD and lung cancer

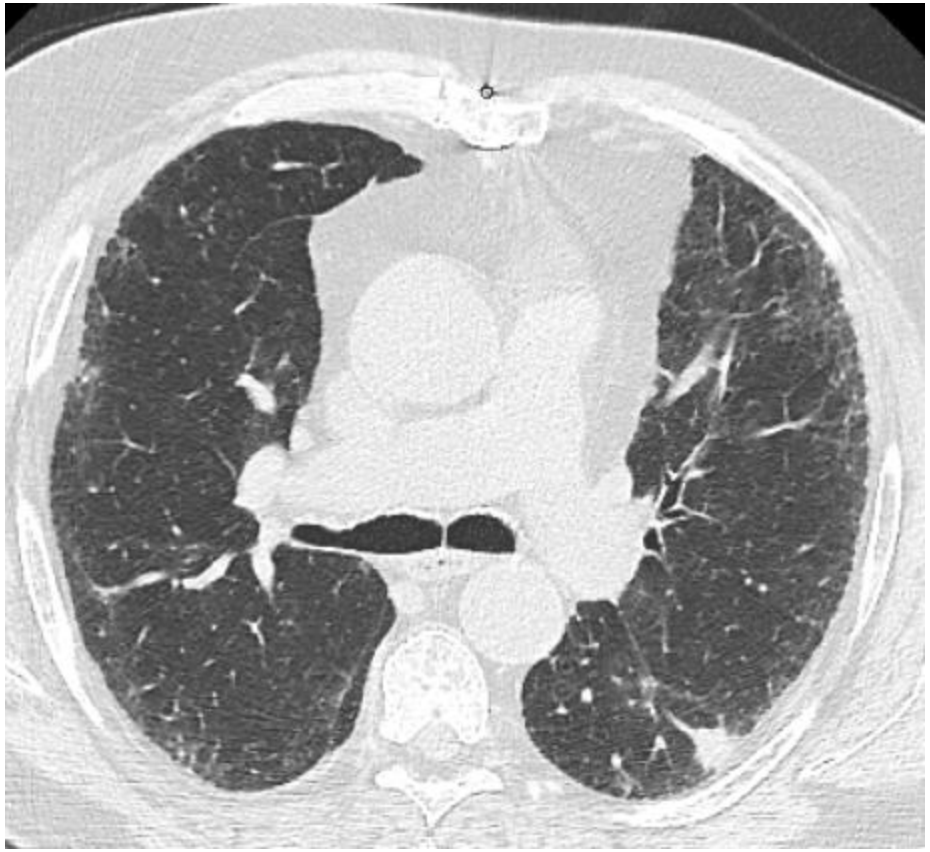
Both ILA and ILDs have an increased risk of pneumonitis as a result of lung cancer treatments – chemotherapy, immunotherapy, radiotherapy.

- ILAs much lower incidence than ILDs.

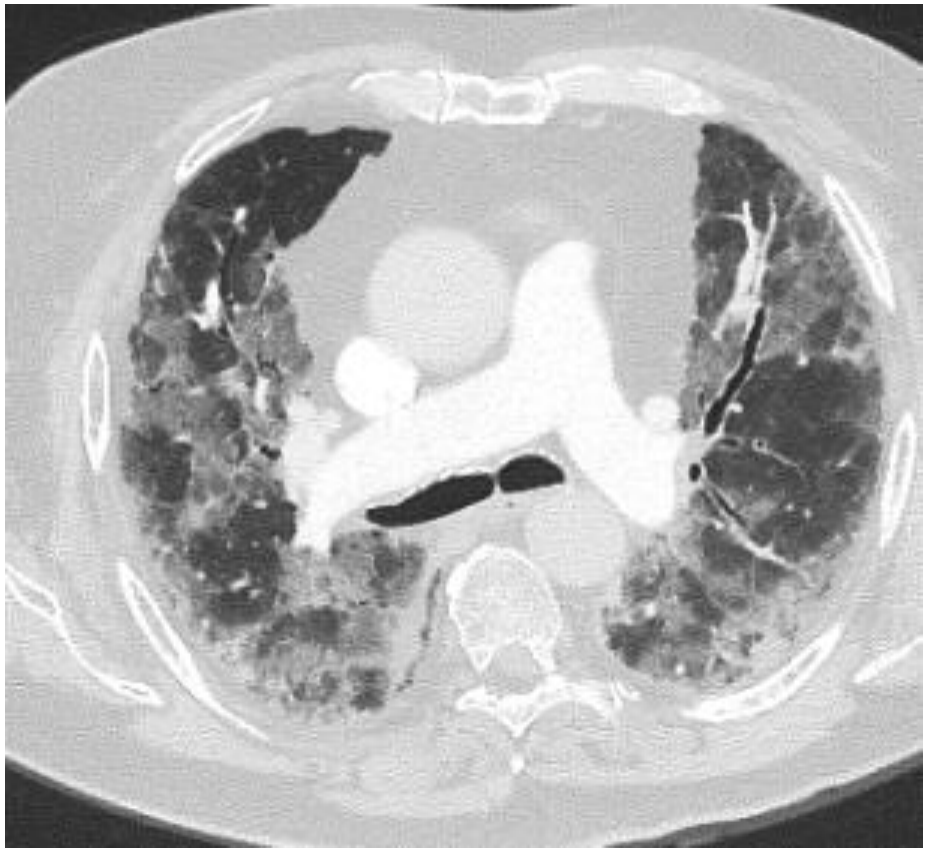
Can be difficult to predict, IPF highest risk.

Significant CTD can be a contraindication to immunotherapy, dependent on disease severity and amount of immune suppression.

ILD and lung cancer - case



ILD and lung cancer - case



Diffuse cystic lung disease

Rare heterogenous group of disorders

- >4 cysts typically suggestive of an underlying disorder
- Thin walled, usually <2mm
- Fall within broad category of ILD, typically affect younger cohort.

Some of the most significant:

- Lymphangioleiomyomatosis (LAM)
- Birt-Hogg-Dubé (BHD)
- Pulmonary Langerhans cell histiocytosis (PLCH)

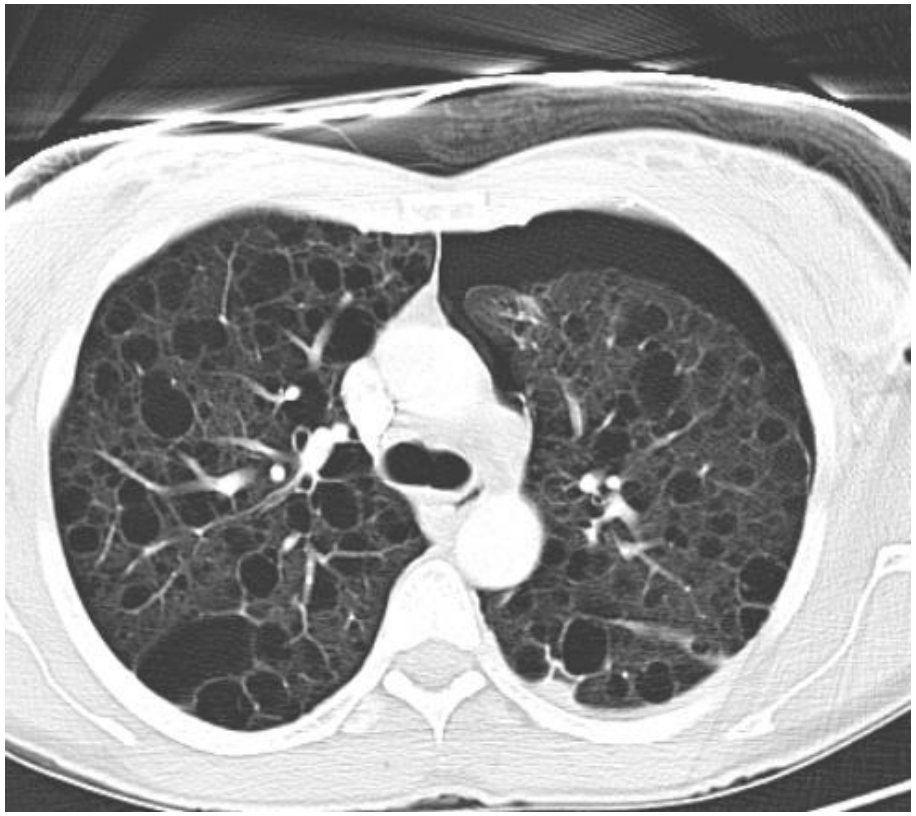
Diffuse cystic lung disease

Some associated with increased risk of PTX, especially LAM, BHD. Less so PLHC, rare with others.

Some have specific treatments, or specific associated features that may be important to identify.

LAM

- Renal AML, abdominal lymphadenopathy, effusions and PTX
- AD or sporadic
- Lung function monitoring, MTOR inhibitors, effusion and PTX management, lung transplantation



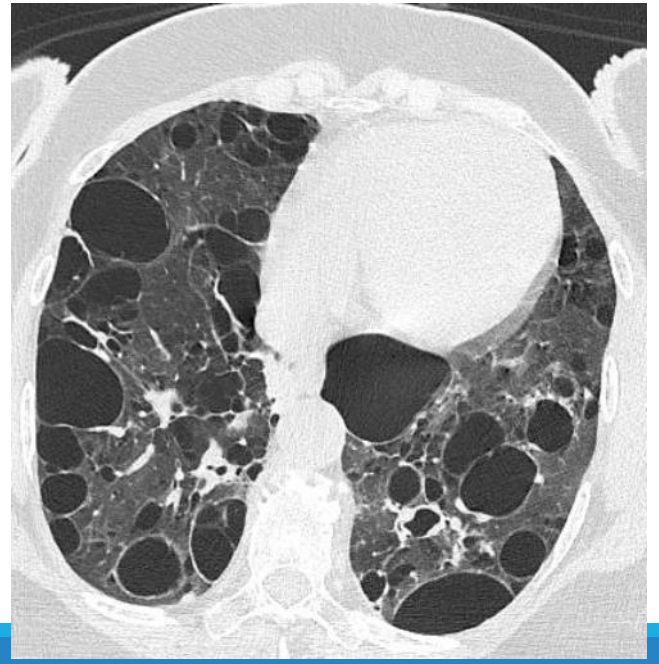
Diffuse cystic lung disease

Some associated with increased risk of PTX, especially LAM, BHD. Less so PLHC, rare with others.

Some have specific treatments, or specific associated features that may be important to identify.

PLHC

- Lung function monitoring, smoking cessation, pulmonary HTN monitoring, bronchodilators if AO.



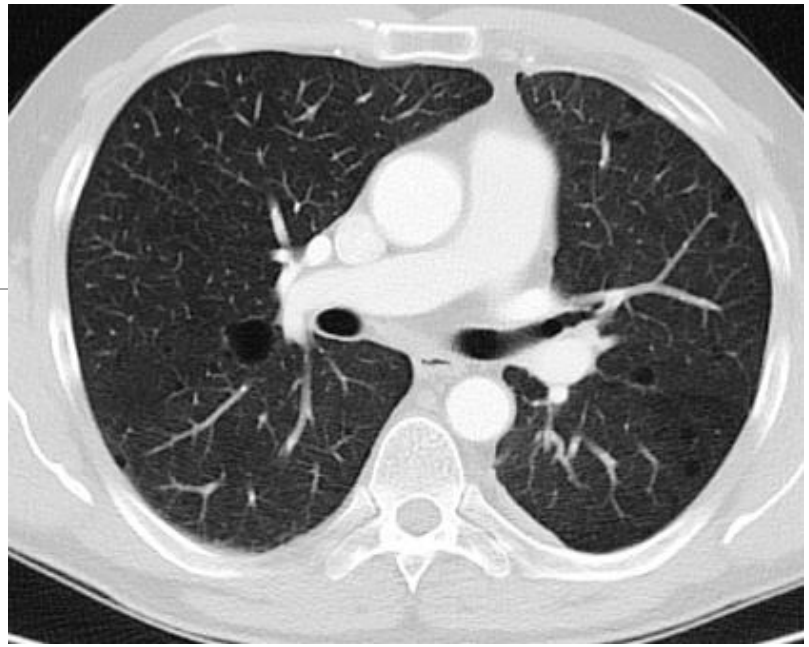
Diffuse cystic lung disease

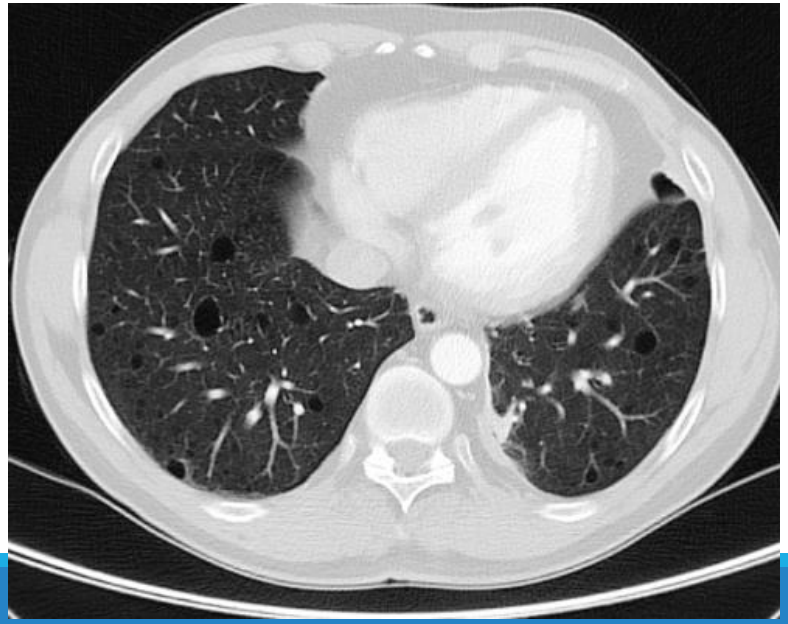
Some associated with increased risk of PTX, especially LAM, BHD. Less so PLHC, rare with others.

Some have specific treatments, or specific associated features that may be important to identify.

BHD

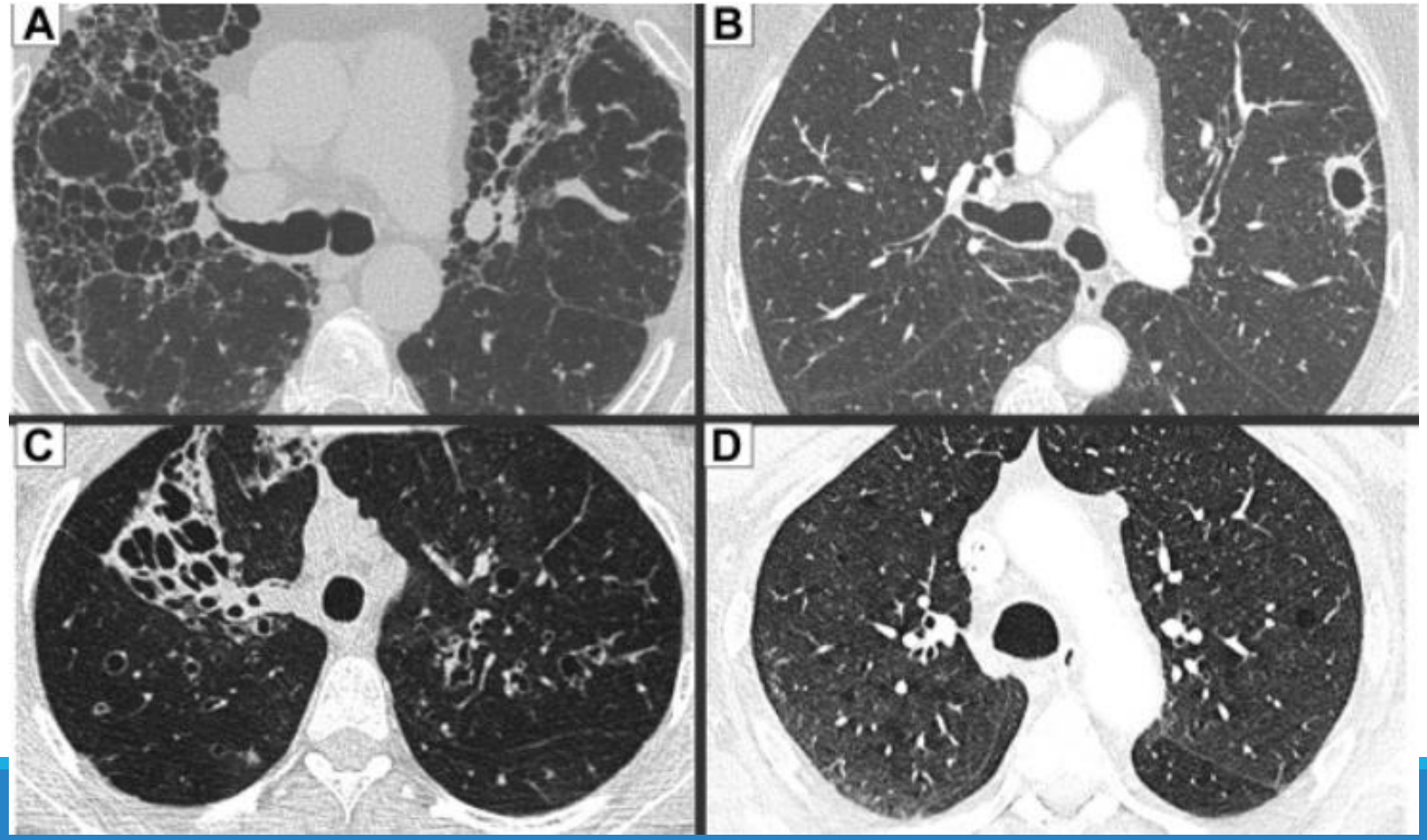
- Autosomal dominant
- Renal tumours, skin fibrofolliculomas
- Early pleurodesis for PTX, renal cancer monitoring, family screening





Diffuse cystic lung disease

Important to distinguish from mimics – honeycombing, cavitating lesions, cystic bronchiectasis, emphysema.



Diffuse cystic lung disease

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Diffuse cystic lung disease[1]	Report	• Clinical review. • Consider referral to a respiratory physician.

Essentially all should be referred.

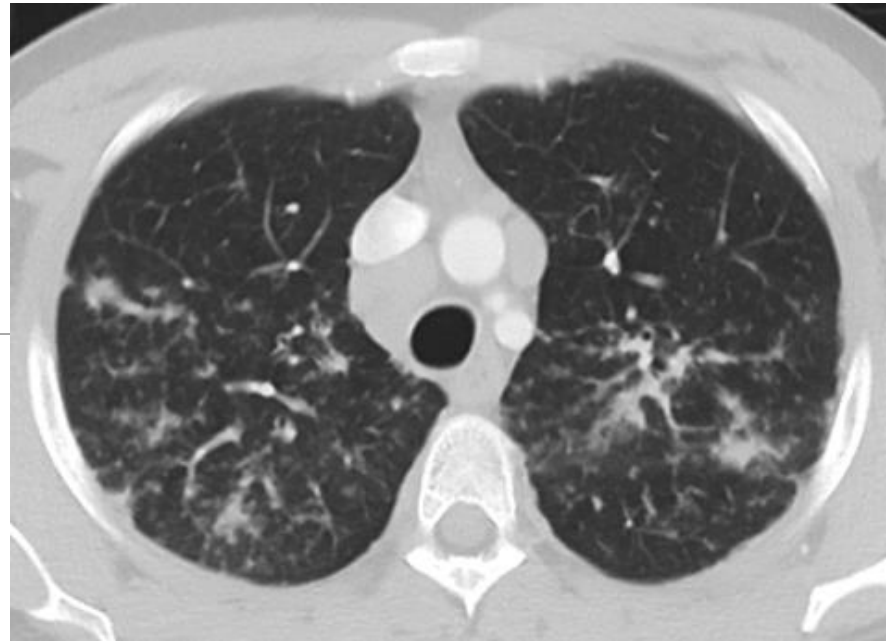
Diffuse nodular lung disease

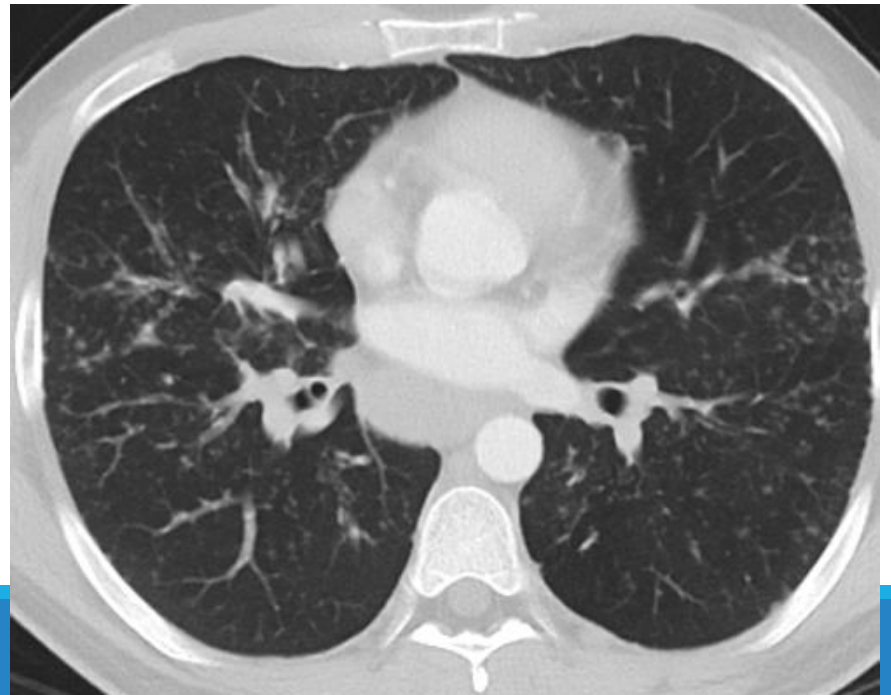
Wide range of disorders, including:

- Sarcoidosis
- Pneumoconiosis – e.g. silicosis
- Langerhans cell histiocytosis
- Respiratory bronchiolitis
- Non-tuberculous mycobacterial infection

Silicosis

Pulmonary sarcoid





NTM infection

Diffuse nodular lung disease

Finding	Reporting recommendation	Management recommendation for reported findings	Reference/source
Lungs			
Diffuse nodular lung disease[1]	Report	• Clinical review. • Consider referral to a respiratory physician.	

Most should be referred for initial assessment, though not all will require ongoing review.

Pleural plaques, thickening, nodules, masses

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Pleura		
Pleural effusion, thickening or mass [1,2]	Report	• Clinical review. • Consider referral to a respiratory physician. ***Supporting Guidance*** • Work-up if suspicious appearances including a new effusion, pleural thickening suspicious for malignancy or mass lesion, including schwannomas (NHS advice as no Australian GP guidance identified).
Bilateral calcified pleural plaques [2,8]	Report	• This finding may indicate previous asbestos exposure. ***Supporting Guidance*** • Information about Occupational Lung Disease including guidance on Diagnosis, Management, and Resources for patients, is available on the Lung Foundation Australia website.

Bilateral calcified pleural plaques

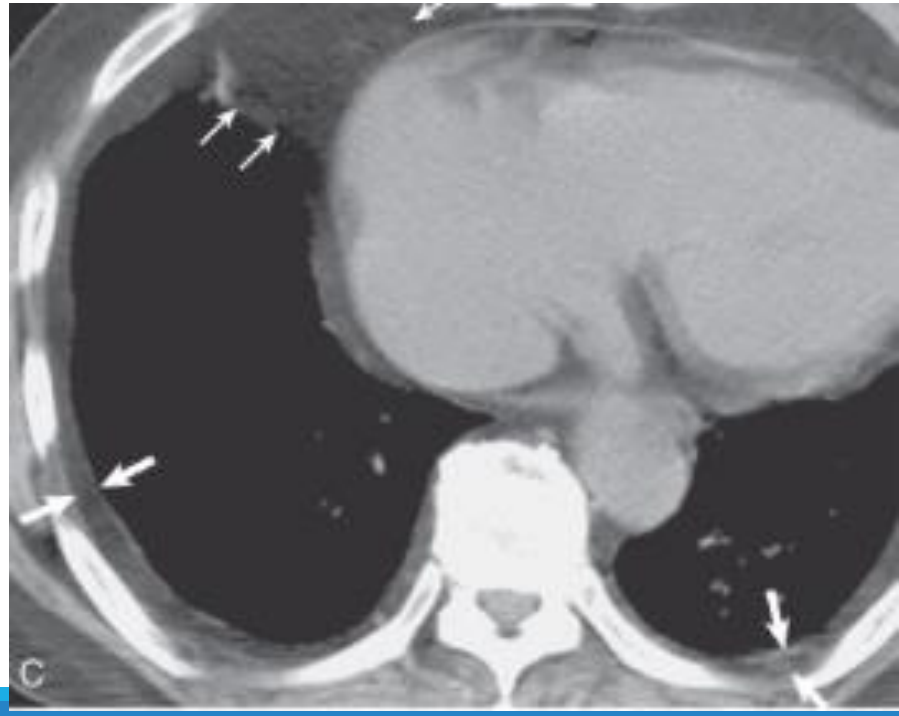
- Indicator of prior asbestos exposure, not pre-malignant

Pleural plaques, thickening, nodules, masses

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Pleura		
Pleural effusion, thickening or mass [1,2]	Report	• Clinical review. • Consider referral to a respiratory physician. ***Supporting Guidance*** • Work-up if suspicious appearances including a new effusion, pleural thickening suspicious for malignancy or mass lesion, including schwannomas (NHS advice as no Australian GP guidance identified).
Bilateral calcified pleural plaques [2,8]	Report	• This finding may indicate previous asbestos exposure. ***Supporting Guidance*** • Information about Occupational Lung Disease including guidance on Diagnosis, Management, and Resources for patients, is available on the Lung Foundation Australia website.

Benign, non-nodular thickening

- Prior asbestos exposure, post infective, post traumatic/surgical



Pleural plaques, thickening, nodules, masses

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Pleura		
Pleural effusion, thickening or mass [1,2]	Report	• Clinical review. • Consider referral to a respiratory physician. ***Supporting Guidance*** • Work-up if suspicious appearances including a new effusion, pleural thickening suspicious for malignancy or mass lesion, including schwannomas (NHS advice as no Australian GP guidance identified).
Bilateral calcified pleural plaques [2,8]	Report	• This finding may indicate previous asbestos exposure. ***Supporting Guidance*** • Information about Occupational Lung Disease including guidance on Diagnosis, Management, and Resources for patients, is available on the Lung Foundation Australia website.

Nodular thickening or masses

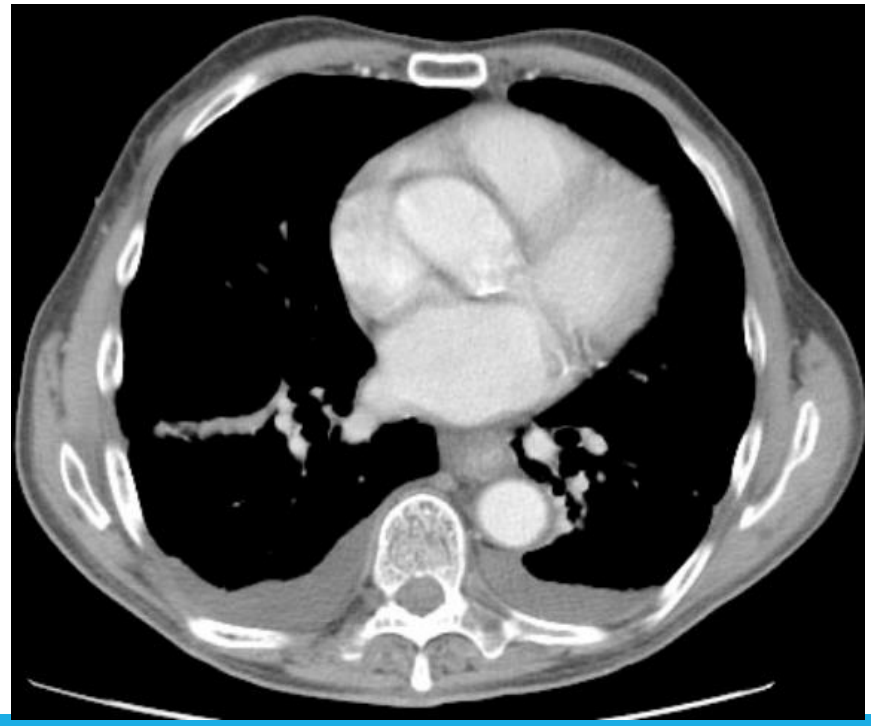
- Schwannoma, solitary fibrous tumour
- Mesothelioma, pleural metastases

Pleural effusions

Finding	Radiologist reporting recommendation	Management recommendation for reported findings and supporting guidance for Primary Care
Pleura		
Pleural effusion, thickening or mass [1,2]	Report	• Clinical review. • Consider referral to a respiratory physician. ***Supporting Guidance*** • Work-up if suspicious appearances including a new effusion, pleural thickening suspicious for malignancy or mass lesion, including schwannomas (NHS advice as no Australian GP guidance identified).
Bilateral calcified pleural plaques [2,8]	Report	• This finding may indicate previous asbestos exposure. ***Supporting Guidance*** • Information about Occupational Lung Disease including guidance on Diagnosis, Management, and Resources for patients, is available on the Lung Foundation Australia website.

Effusions

- Bilateral
  - Usually transudative, cardiac, liver, renal failure
  - Assess for underlying cause/treat
- Unilateral
  - Usually infective or malignant
  - Most of these should be referred for Respiratory assessment



Mediastinal lymphadenopathy

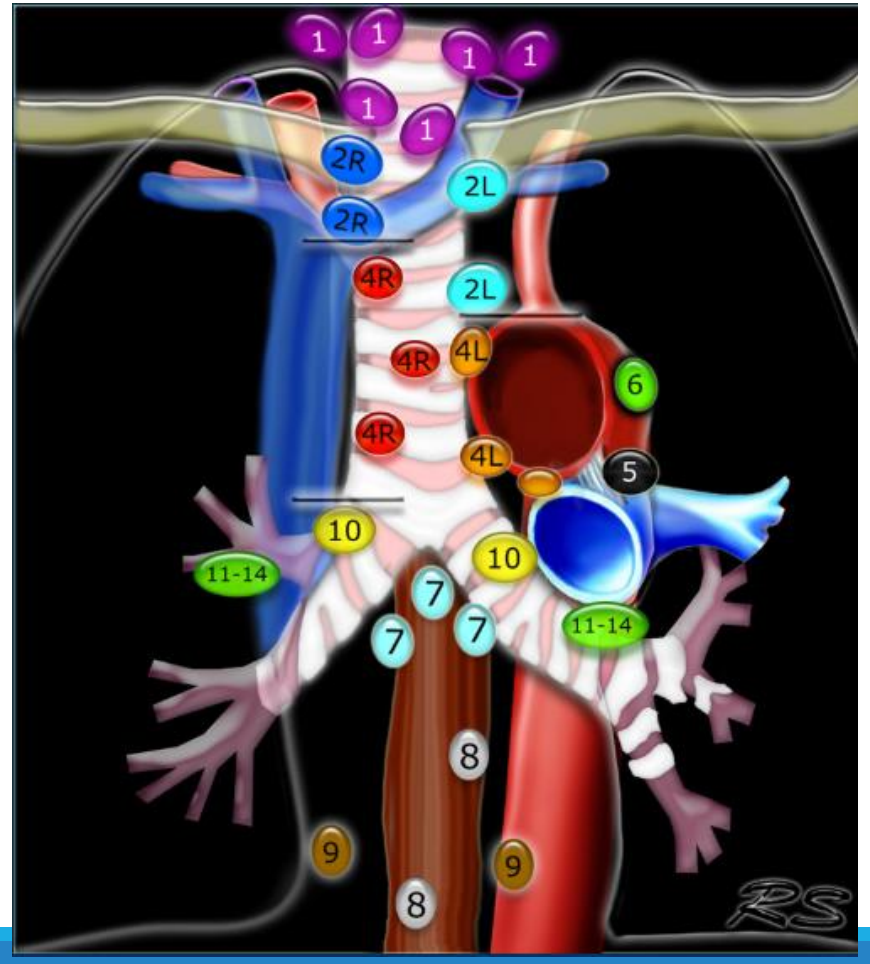
Mediastinum		
Lymph nodes [1,2]	*<15mm short axis* – do not report *≥ 15mm short axis* – report	• *Mediastinal lymph nodes ≥15mm:* o Clinical review. o Consider referral to a respiratory physician.

Vast range of disorders can cause thoracic lymphadenopathy

- Infection incl. tuberculosis
- Sarcoidosis
- Lymphoproliferative disorders
- Lung cancers
- Reactive to a local issue e.g. infection

We can sample paratracheal, subcarinal, hilar, lobar, interlobar nodes via EBUS.

Most should be referred to Respiratory, some may benefit from concurrent Haematology referral.

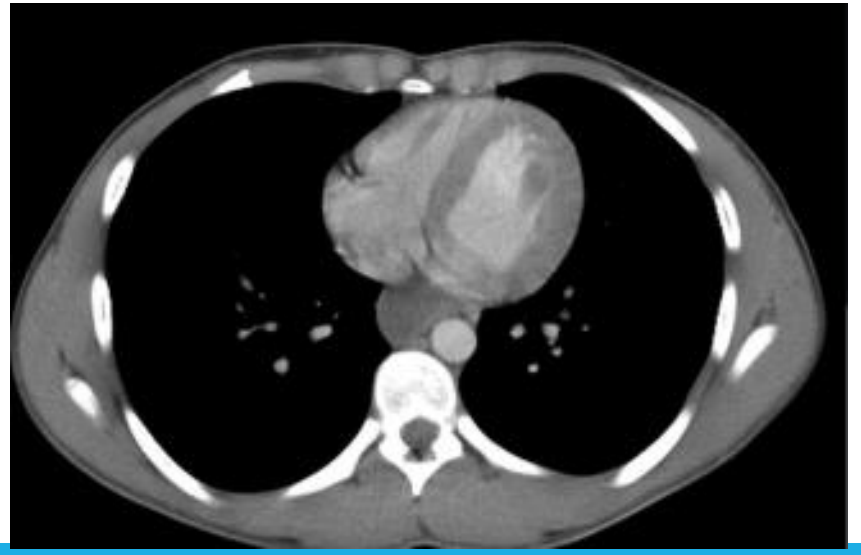


Mediastinal mass

Mediastinum		
Other [1,2]	*Cyst* – do not report *Mass* – report	• Clinical review. • Refer to a cardiothoracic surgeon or a respiratory physician. ***Supporting Guidance*** • Refer all lesions in the mediastinum that are not clearly simple cysts. • Work-up depending on clinical assessment. (NHS advice as no Australian GP guidance identified).

Mediastinal cysts

- Mostly developmental, often asymptomatic, sometimes compressive symptoms
- E.g. Bronchogenic cyst, oesophageal duplication cyst, pericardial cyst, thymic cyst

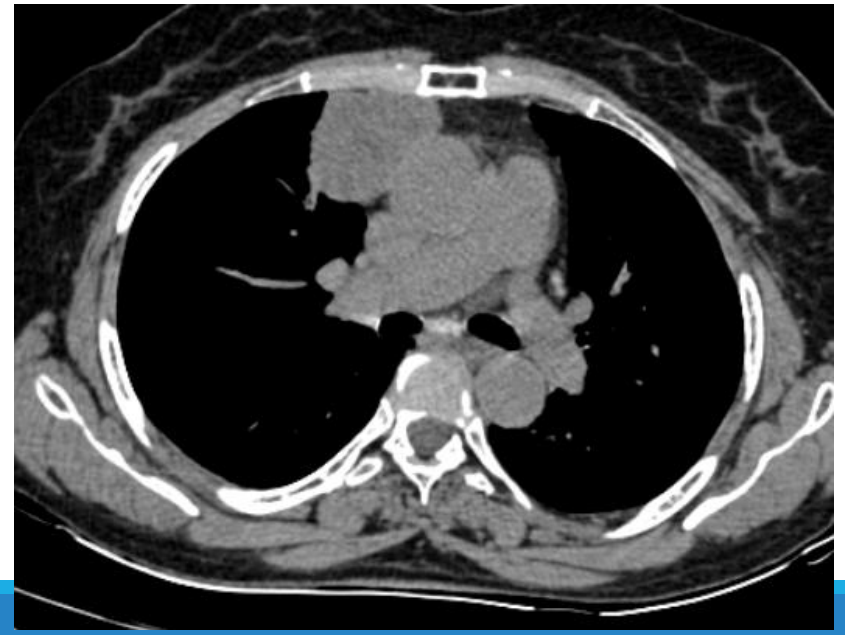


Mediastinal mass

Mediastinum		
Other [1,2]	*Cyst* – do not report *Mass* – report	• Clinical review. • Refer to a cardiothoracic surgeon or a respiratory physician. ***Supporting Guidance*** • Refer all lesions in the mediastinum that are not clearly simple cysts. • Work-up depending on clinical assessment. (NHS advice as no Australian GP guidance identified).

Mediastinal masses

- Thymoma, thymic carcinoma, lymphoma, germ cell tumours
- Require referral and workup



Review of first 3 months of program

Enrollments in program- first 3 months

Number of Enrolments in the program - From the NCSR				
2025	**Tasmania**		Australia	
Enrolment month	Female	Male	Female	Male
July	76	113	3370	4490
August	108	114	4559	5675
September	59	81	2543	3143
October (2nd)	0	4	55	64
Total	**243**	**312**	10527	13372
Grand Total	**555**		**23899**	

Estimated TAS eligibility in first year = 19,000
Estimated TAS uptake 10%-20% = 1,900 to 3,800
- would be equivalent to 475 to 950 in first 3 months

First 3 months – other nodules categories

TASMANIA 01 JULY - 09 OCTOBER 2025															
		Scan Type				Recommendation									
		Baseline	Interval	Two-Yearly	Not Determinable	Cat-0 (1 mth)	Cat-0 (2 mths)	Cat-0 (3 mths)	Cat-1 (24 mths)	Cat-2 (12 mths)	Cat-3 (6 mths)	Cat-4 (3 mths)	Cat-5	Cat-6	Not Determinable
Female	**Total**	**329**	**1**	**0**	**6**	**0**	**4**	**6**	**229**	**24**	**3**	**10**	**4**	**1**	**55**
	<50	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55-59	79	0	0	2	0	2	1	55	3	1	3	0	0	16
	70+	9	0	0	1	0	0	0	6	1	0	0	0	0	3
	50-54	53	0	0	0	0	0	1	37	4	0	1	1	0	9
	65-69	92	0	0	1	0	1	3	58	13	1	2	1	1	13
	60-64	96	1	0	2	0	1	1	73	3	1	4	2	0	14
Male	**Total**	**454**	**0**	**0**	**5**	**1**	**2**	**12**	**302**	**29**	**6**	**16**	**5**	**2**	**84**
	<50	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55-59	96	0	0	1	0	0	2	68	5	0	7	0	0	15
	60-64	123	0	0	2	0	2	4	85	6	0	2	1	0	25
	65-69	139	0	0	0	1	0	4	85	11	5	5	1	1	26
	70+	18	0	0	1	0	0	1	8	3	1	1	1	0	4
	50-54	78	0	0	1	0	0	1	56	4	0	1	2	1	14
Total		**783**	**1**	**0**	**11**	**1**	**6**	**18**	**531**	**53**	**9**	**26**	**9**	**3**	**139**

First 3 months – Cat 5/6

TASMANIA 01 JULY - 30 SEPTEMBER 2025						
		July	August	September		
		Cat5/6 Scans	Cat5/6 Scans	Cat5/6 Scans		
Male	**Total**	**2**	**2**	**3**	Total Cat5/6 scans	12
	50-54	2	0	0		
	<50	0	1	0		
	55-59	0	0	0		
	60-64	0	0	1		
	65-69	0	1	1		
	70+	0	0	1		
Female	**Total**	**0**	**4**	**1**		
	<50	0	0	0		
	50-54	0	1	0		
	55-59	0	0	0		
	60-64	0	1	1		
	65-69	0	2	0		
	70+	0	0	0		
Total		**2**	**6**	**4**		

Region	# Enrolments
North West	173
North	158
South	237
Unknown	9
Total	577

First 3 months – additional findings

TASMANIA - NLCSP Actionable Additional Findings 01/07/20245 - 02/10/2025 - from National Cancer Screening Register										
Additional Findings	LDCT Scans	Lungs Finding	Pleura Finding	Mediastinum Finding	Cardiovascular Finding	Abdomen Finding	Thyroid Finding	Breast Finding	Bone Finding	Other Finding
Female	318	45	2	0	53	11	3	1	37	2
Male	434	67	6	1	109	26	6	0	47	6
Total	**752**	**112**	**8**	**1**	**162**	**37**	**9**	**1**	**84**	**8**

422 incidental findings for 752 scans

- Incidental finding rate = 56%
- Govt modelling = 11%
- Most common – CV, lung, bone

Cat 5/6 nodule = 1.6%

- Govt modelling 1.1%

Referrals to RHH Respiratory

10 referred due to findings from a screening study:

- 1 category 6 finding
  - Stage IV squamous cell lung cancer – bronchoscopy -> chemotherapy + immunotherapy
- 4 category 5 findings
  - 1 proceed to biopsy – atypia only, ongoing surveillance
  - 1 awaiting biopsy
  - 2 ongoing surveillance
- 1 category 4 nodule + benign incidental finding
  - Referral declined/recommended return to screening
- 4 incidental findings
  - 1 likely ILD
  - Possible tracheal lesion – bronchoscopy – mucous only
  - Mild diffuse pleural thickening – awaiting review
  - 1 with clusters of nodules/"diffuse nodular disease" – surveillance

Conclusions – what findings to refer?

Progressive ILA or suspected ILD

Cystic lung disease

Diffuse nodular lung disease

Nodular pleural thickening or pleural mass

Unilateral pleural effusions

Most mediastinal lymphadenopathy

Mediastinal masses

Conclusions – what findings to refer?

Mostly do not need referral

- Pleural plaques
- Pleural thickening with known cause/reported as benign
- Bilateral pleural effusions

Referral only if you would ordinarily due to severity

- Emphysema
- Bronchiectasis

Conclusions – program so far

Reasonable uptake so far of those eligible despite minimal advertising.

Very high proportion of incidental findings so far – majority lung, cardiac, osteoporosis.

Very high quality of referrals for Respiratory assessment thus far.

Very high quality of structured radiology reports.

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Incidental cardiac findings

Lung Cancer Screening Program

- Screening cohort: high cardiovascular risk
- Cardiac findings
  - Common
  - Predictive
  - Actionable
- May have greatest effect on mortality

The big 4

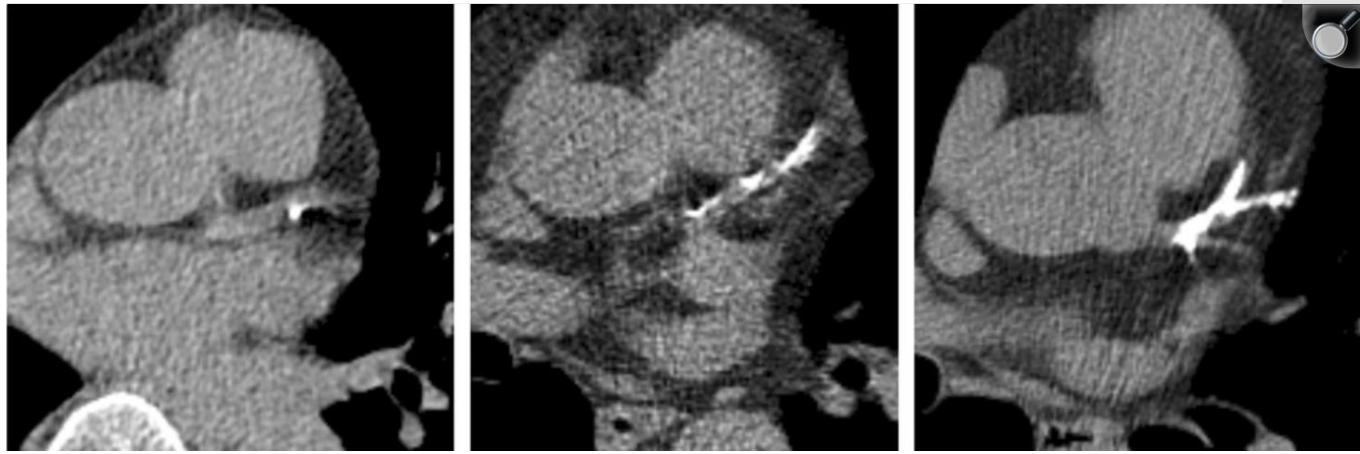
- Coronary calcium: 60 – 70%
  - Moderate – severe: 25 – 30%
- Aortic valve calcium: 10 – 15%
- Mitral annular calcium: 10 – 20%
- Thoracic aortic abnormalities: 5%

Other stuff

- Pulmonary artery dilatation
- Pericardial effusion
- Left atrial enlargement
- Left ventricular enlargement

Coronary calcium

- Indicates atherosclerotic plaque presence
- ↑ calcium = more plaque = more risk
- No calcium ≠ no plaque
- ↑ calcium ≠ obstructive plaque / flow limitation
- Almost meaningless if history of CV event



Chiles C, et al; Radiology 2015;276(1):82-90

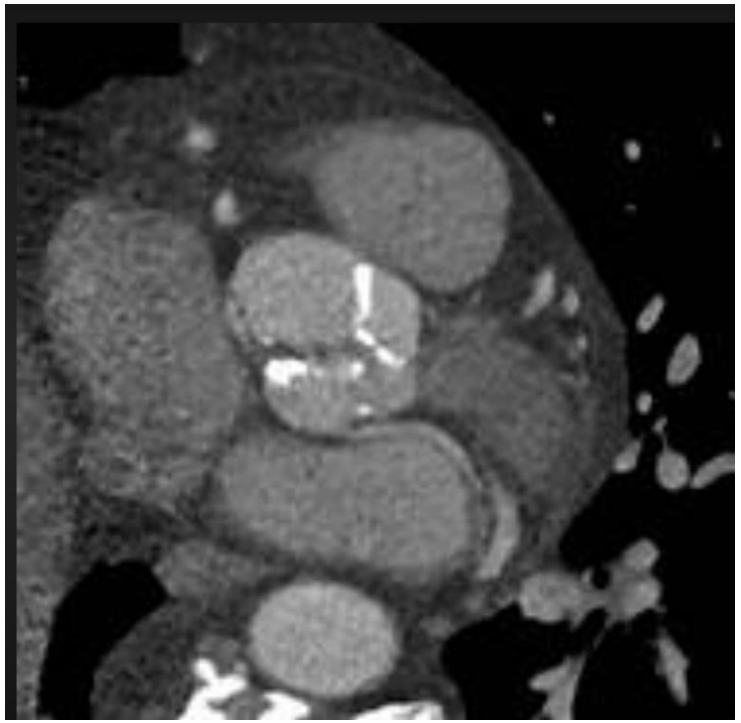
Management

- Mild vs moderate vs severe
- Reduce CV risk
  - Stop smoking
  - Treat LDL
  - Consider icosapent ethyl
    - Previous event + LDL controlled + TG > 1.7mmol/L
  - Manage BP
  - Optimize DM control
  - ? Aspirin
    - Ca score > 300 – "reasonable"
    - Ca score 100 – 300 - "may be considered"
    - Ca score 0 – harm
  - (beta-blocker)

- Functional assessment ? Ischemia
  - Rarely if asymptomatic
  - Many breathless
  - Options
    - Functional imaging – stress echo, MIBI
    - (Full cardiac CT – not useful if severe calcification)
    - (Invasive cath)

Aortic valve calcification

- Common in older smokers
- Clue for aortic sclerosis / stenosis
- ? Echo
  - Murmur
  - Symptoms
  - Heavy calcification



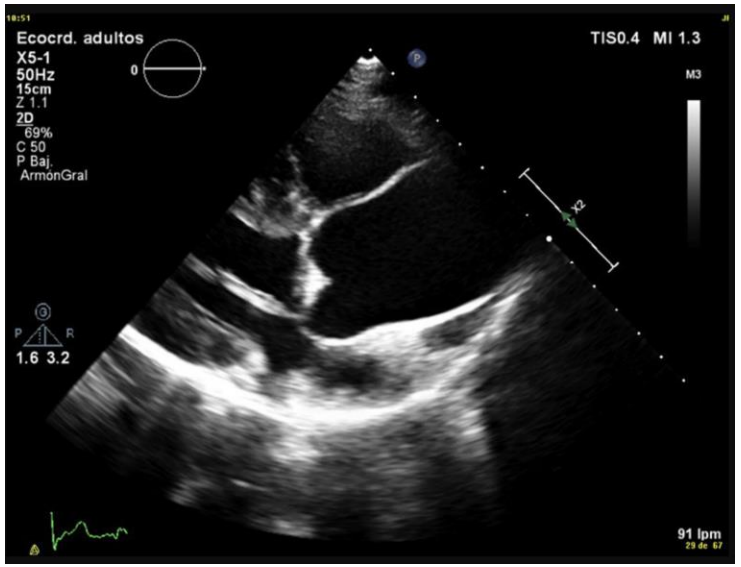
Mitral annular calcification (MAC)

- Very common
- Associated with
  - Diastolic dysfunction
  - AF
  - Functional mitral regurgitation
- ? Echo
  - Murmur
  - Heavy MAC and symptoms

Thoracic aortic abnormalities

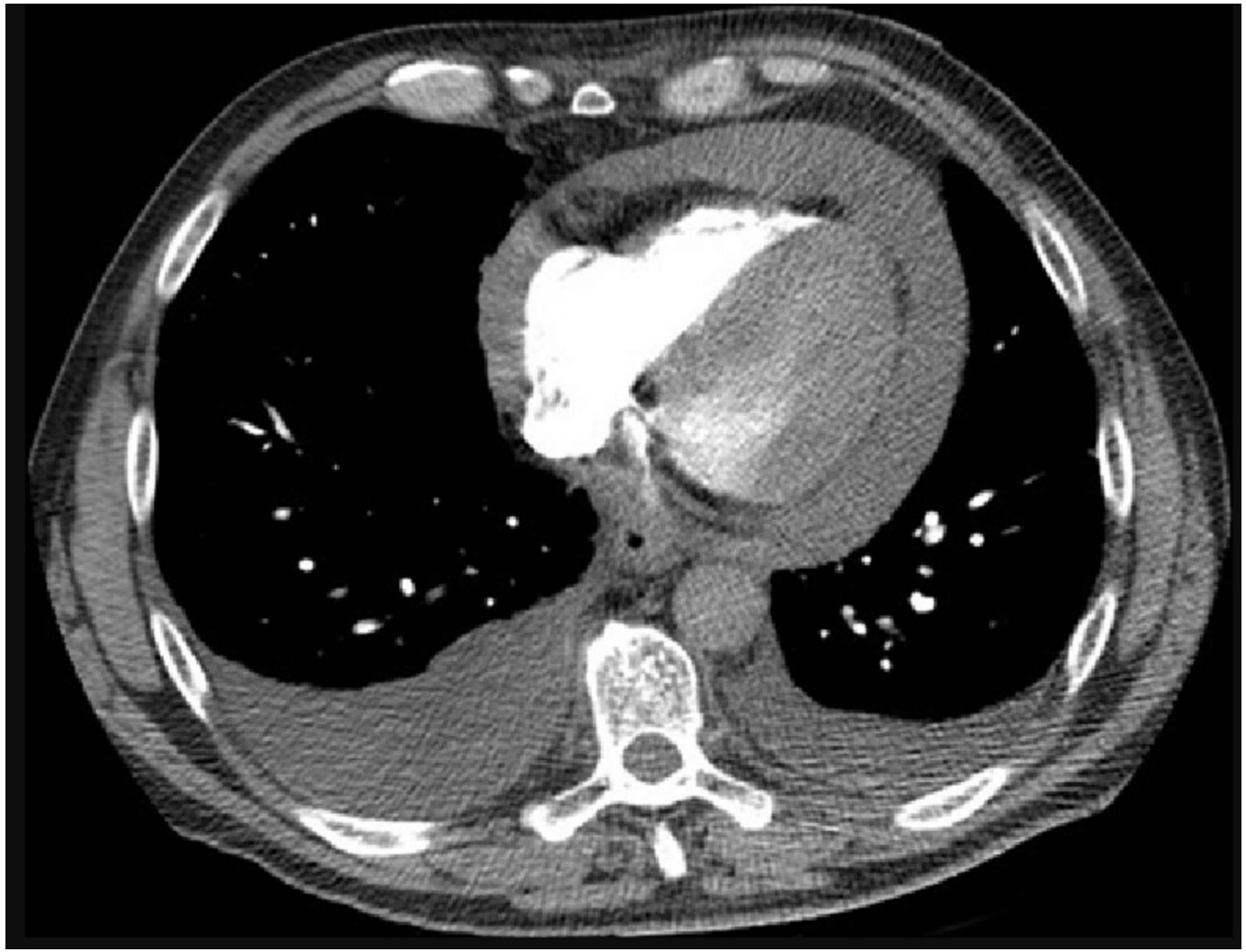
- ≥ 40mm: monitor
- ≥ 45mm: echo + CT aorta
- ≥ 50 – 55mm: echo + CT aorta + cardiology referral (if appropriate)

- BP control
- Smoking cessation



Pulmonary artery dilatation

- May indicate pulmonary hypertension
- ? Symptoms, lung disease
- Echo
  - Symptoms
  - Right heart signs on exam



Pericardial effusion

Rarely significant

If moderate / large → echo

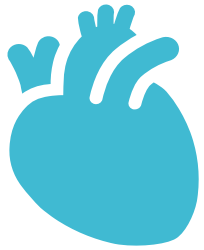
Mostly benign

Left atrium

Marker of

- Chronic hypertension
- AF risk

Echo if symptoms or arrhythmias



Left ventricle

Usually supports underlying hypertension

Left chamber enlargement

Key messages

- Lung cancer screening CTs identify far more actionable CV risk than lung cancer
- GPs are best placed to act
- Most findings are risk factor driven, not structural heart disease

- Most patients don't need referral for incidental findings
- Most don't need an echo
- ***Focus on aggressive prevention***

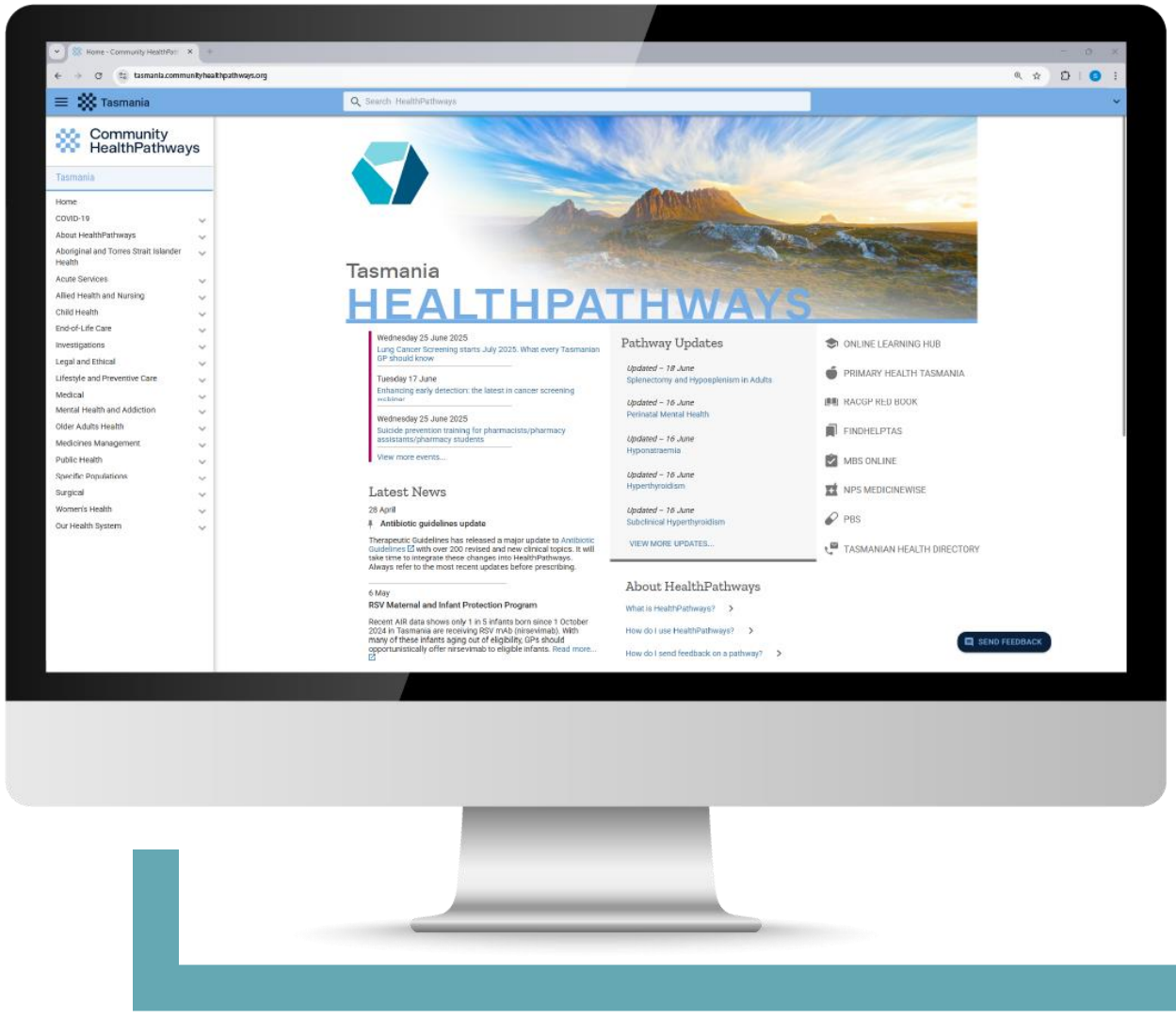
Q&A

Community HealthPathways

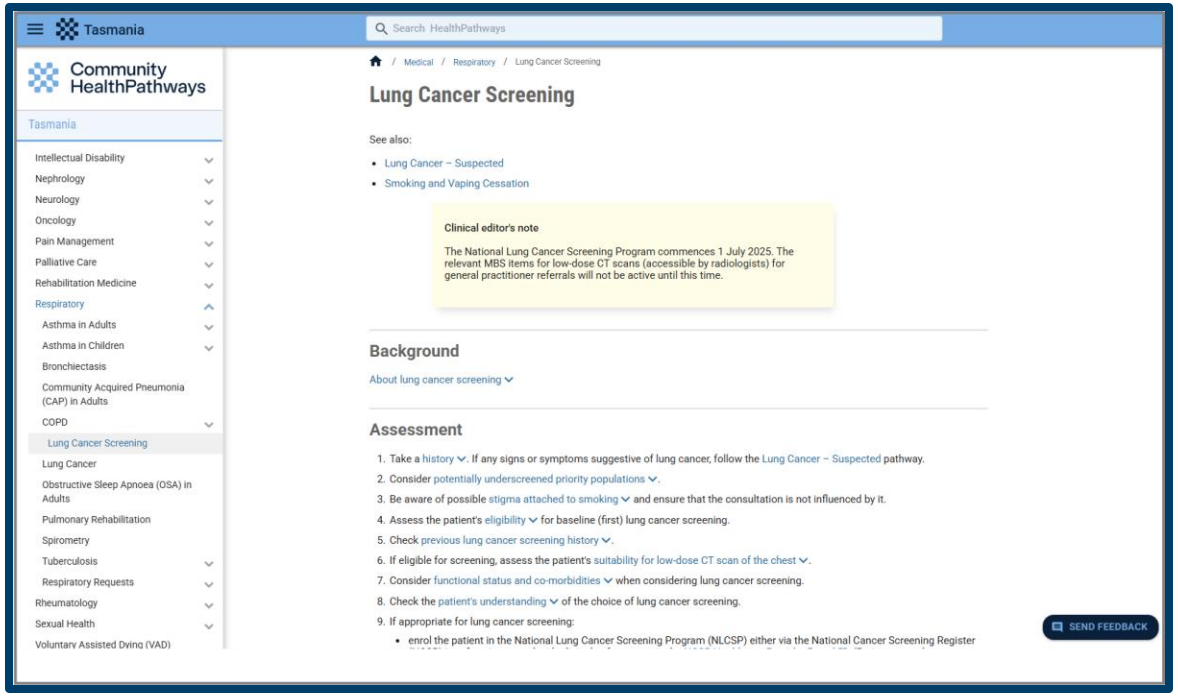
Tasmanian HealthPathways

is a web-based information portal developed by Primary Health Tasmania. It is designed to help primary care clinicians plan local patient care through primary, community and secondary healthcare systems.

tasmania.communityhealthpathways.org



Community HealthPathways



To gain access to HealthPathways, please email
healthpathways@primaryhealthtas.com.au

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